



Über dieses Buch

Dies ist ein digitales Exemplar eines Buches, das seit Generationen in den Regalen der Bibliotheken aufbewahrt wurde, bevor es von Google im Rahmen eines Projekts, mit dem die Bücher dieser Welt online verfügbar gemacht werden sollen, sorgfältig gescannt wurde.

Das Buch hat das Urheberrecht überdauert und kann nun öffentlich zugänglich gemacht werden. Ein öffentlich zugängliches Buch ist ein Buch, das niemals Urheberrechten unterlag oder bei dem die Schutzfrist des Urheberrechts abgelaufen ist. Ob ein Buch öffentlich zugänglich ist, kann von Land zu Land unterschiedlich sein. Öffentlich zugängliche Bücher sind unser Tor zur Vergangenheit und stellen ein geschichtliches, kulturelles und wissenschaftliches Vermögen dar, das häufig nur schwierig zu entdecken ist.

Gebrauchsspuren, Anmerkungen und andere Randbemerkungen, die im Originalband enthalten sind, finden sich auch in dieser Datei – eine Erinnerung an die lange Reise, die das Buch vom Verleger zu einer Bibliothek und weiter zu Ihnen hinter sich gebracht hat.

Nutzungsrichtlinien

Google ist stolz, mit Bibliotheken in partnerschaftlicher Zusammenarbeit öffentlich zugängliches Material zu digitalisieren und einer breiten Masse zugänglich zu machen. Öffentlich zugängliche Bücher gehören der Öffentlichkeit, und wir sind nur ihre Hüter. Nichtsdestotrotz ist diese Arbeit kostspielig. Um diese Ressource weiterhin zur Verfügung stellen zu können, haben wir Schritte unternommen, um den Missbrauch durch kommerzielle Parteien zu verhindern. Dazu gehören technische Einschränkungen für automatisierte Abfragen.

Wir bitten Sie um Einhaltung folgender Richtlinien:

- + *Nutzung der Dateien zu nichtkommerziellen Zwecken* Wir haben Google Buchsuche für Endanwender konzipiert und möchten, dass Sie diese Dateien nur für persönliche, nichtkommerzielle Zwecke verwenden.
- + *Keine automatisierten Abfragen* Senden Sie keine automatisierten Abfragen irgendwelcher Art an das Google-System. Wenn Sie Recherchen über maschinelle Übersetzung, optische Zeichenerkennung oder andere Bereiche durchführen, in denen der Zugang zu Text in großen Mengen nützlich ist, wenden Sie sich bitte an uns. Wir fördern die Nutzung des öffentlich zugänglichen Materials für diese Zwecke und können Ihnen unter Umständen helfen.
- + *Beibehaltung von Google-Markenelementen* Das "Wasserzeichen" von Google, das Sie in jeder Datei finden, ist wichtig zur Information über dieses Projekt und hilft den Anwendern weiteres Material über Google Buchsuche zu finden. Bitte entfernen Sie das Wasserzeichen nicht.
- + *Bewegen Sie sich innerhalb der Legalität* Unabhängig von Ihrem Verwendungszweck müssen Sie sich Ihrer Verantwortung bewusst sein, sicherzustellen, dass Ihre Nutzung legal ist. Gehen Sie nicht davon aus, dass ein Buch, das nach unserem Dafürhalten für Nutzer in den USA öffentlich zugänglich ist, auch für Nutzer in anderen Ländern öffentlich zugänglich ist. Ob ein Buch noch dem Urheberrecht unterliegt, ist von Land zu Land verschieden. Wir können keine Beratung leisten, ob eine bestimmte Nutzung eines bestimmten Buches gesetzlich zulässig ist. Gehen Sie nicht davon aus, dass das Erscheinen eines Buchs in Google Buchsuche bedeutet, dass es in jeder Form und überall auf der Welt verwendet werden kann. Eine Urheberrechtsverletzung kann schwerwiegende Folgen haben.

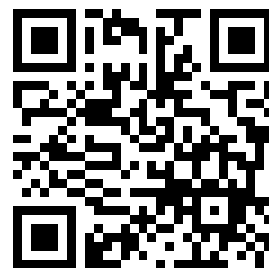
Über Google Buchsuche

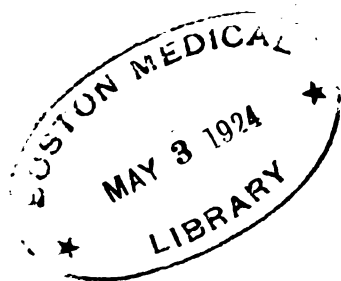
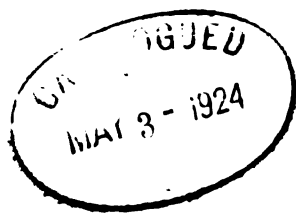
Das Ziel von Google besteht darin, die weltweiten Informationen zu organisieren und allgemein nutzbar und zugänglich zu machen. Google Buchsuche hilft Lesern dabei, die Bücher dieser Welt zu entdecken, und unterstützt Autoren und Verleger dabei, neue Zielgruppen zu erreichen. Den gesamten Buchtext können Sie im Internet unter <http://books.google.com> durchsuchen.

This is a reproduction of a library book that was digitized by Google as part of an ongoing effort to preserve the information in books and make it universally accessible.

GoogleTM books

<https://books.google.com>





Food and Sanitation.

INDEX TO VOL. III. (53-70)

From August 12, 1893, to December 30, 1893.

- ADULTERATION:** Dr. Hill on Food, 233; Durham Chief Inspector on, 372; House of Commons and, 273; Kesteven C. C. and Beer, 243; Mr. J. Hutton and, 241; Norfolk C.C. and, 828, Plymouth and the Acts, 254; Shropshire and, 330; Somerset House and, 274.
- Adulteration Appeals,** 234.
- Adulteration Hoaxing Answers,** 392.
- Adulteration Law, Technicality in,** 367.
- Adulteration of Food: its Influence upon Health,** 323, 354, 373.
- Adulterators, A Revelation for,** 379.
- Agriculture: Commission,** 265, 291; **Scholarship,** 326.
- Analysis, Refusing to sell for,** 234.
- Analyst: Discussion at Limerick,** 328; **Woolwich and Mr. Johnson,** 232; **Magistrates and the,** 379; **A Fool upon an,** 299.
- Analysts and Inspectors, Facts Important to,** 292.
- Analysts: Derby C. C. and its,** 325; **Outsiders in Dublin,** 233; **Peculiar Proceedings in Ireland,** 310.
- Analytical Vagaries,** 360.
- Bacon, Trade Frauds,** 247, 255, 263.
- Bacur and the Grocers,** 342.
- Baking Powder: Alum in,** 294; **Is it an Article of Food,** 397.
- Bedford and the Acts,** 330.
- Beef Fats,** 389.
- Beer: Swindling Brewer,** 342, 358; **Bishop and Brewer,** 366; **Flintshire C.C. and Brewing,** 290.
- Biron's Ridiculous Fines,** 376.
- Board of Agriculture,** 335, 362.
- Brewery Exhibition,** 333.
- Brown, Mr. William (Deed of Assignment),** 373.
- Butter: Bacteria in,** 266; **Cork Market,** 326; **Wasting Australia's Money,** 362; **Danish,** 362; **Boric Acid in,** 363; **Public Market Frauds,** 367; **Excess Water in,** 273, 371; **Retailer sues Merchant,** 409. (See also Co-operation.)
- CANDLES: Kingzett's Sulphur,** 353.
- Cattle, Inspection in United States,** 401.
- Certificates, Mr. Stock on,** 361.
- Champagne, Alleged Frauds,** 382, 401.
- Chicago, British Awards at,** 362.
- Cigars (British), Somerset House and,** 266.
- Condensed Milk, Spurious,** 410.
- Co-operation, Water as Butter,** 339; **Manchester Society and Butter,** 341; **Is it Honest,** 348. (See also leading articles)
- Corned Beef, Death from Eating,** 372.
- Correspondence: Answers to Correspondence,** 305, 328, 367; **Baking Powder,** 305; **Foreign Flour,** 246; **Jam,** 246, 262, 323; **Margarine,** 402, 410; **Maybrick Case,** 238, 384; **Meat Extract Revelations,** 385, 394; **Murphy's Cancer Cure,** 410; **Seigel's Syrup,** 384; **Sending Samples,** 344; **Unfermented Wines,** 385; **Vinegar,** 258, 344, 364, 376, 384, 394, 402; **Water,** 336; **Yeast,** 328.
- County Council, West Suffolk,** 254.
- Cream of Tartar, Lead in,** 354.
- DAIRY FARMING: School opened,** 266; **Dairy Show,** 308; **Profits of a Dairy,** 384; **Dairy Farming in 1892-3,** 406.
- Dairymen: Metropolitan Benevolent Institution,** 398; **and Nottingham Town Council,** 250.
- Drunk Cure, a New Company,** 376.
- ENGLISH INDUSTRIES: Why not Encourage them,** 332.
- English Law, Object Lessons,** 333.
- Food: Colouring in,** 231; **Rotten,** 274; **Inspector for Eekington,** 249.
- Food and Drugs Acts: Inspector Tyler on,** 253; **Legislation,** 268; **Salts and,** 291; **Working of,** 296.
- Fraud Fostering County Councils,** 393.
- Ginger Trade Frauds,** 332.
- Gin, Hollands,** 387.
- Grimby, Sanitary Condition of,** 232.
- Grocer's Shop, How to Make Pay,** 342.
- Guinness's Stout, Imitations,** 264, 328.
- Gunpowder, a New,** 298.
- HACKNEY Officials and Sanitation,** 392.
- Horsford's Acid Phosphate,** 356.
- INSPECTORS: Attempting to Bribe,** 299, 328; **at Blackpool,** 265; **in Glasgow,** 258; **Suggestions to,** 257.
- Inventions,** 328, 362.
- JAM, Colourings and Fruit,** 231, 256. (See also Correspondence).
- LARD: Adulteration of,** 342; **Kilvert's,** 333, 362, 370; **Substitutes,** 405.
- Leading Articles: Analyst and Traders,** 386; **Bacon Frauds,** 239; **Brewers' Swindles,** 261; **Co-operation,** 306, 403; **Disinfectants,** 357; **English Trade,** 255, 272; **Fertilizers Bill,** 280; **Jam,** 231; **Lard,** 321; **Meat Marking Commission,** 377; **Milk,** 293, 365; **Somerset House,** 247; **W. T. Stead,** 329, 337, 345, 395; **Yeast,** 313.
- Liquorice and Ginger Adulteration,** 354.
- Local Government Board's Report,** 355, 363, 374.
- Lord Winchelsea's Sprat,** 347.
- MAGISTRATE, A fooliah,** 327.
- Margarine,** 333; **in United States,** 257; **Real Antagonist of,** 389; **Maybrick Case,** 360, 368, 380, 383.
- Meat: Bad,** 274, 278, 292, 295; **Bolton Butchers,** 290; **Inspection,** 233, 379; **Tinned,** 233, 292, 371, 401.
- Meat Extracts: Revelations,** 232, 350, 389, 398; **Bovril and Nansen's Expedition,** 242; **Essence for Army Condemned,** 401.
- Meat-Marking Committee: Mr. Tyler's Evidence,** 240; **Report,** 250.
- Merchandise Marks Act,** 327, 349.
- Milk: Appeal Case,** 352; **Condensed Skim,** 372; **Dirty Cans,** 233; **(Imported) Dangers of,** 301; **Lloyd's Cows,** 289, 335, 362; **Magistrates and Frauds,** 402; **Premises,** 243; **Quality,** 302; **Somerset House and,** 289, 290, 291; **Wiltshire C.C. and,** 392.
- OBITUARY,** 301.
- Oleomargarine Laws of America,** 248, 335.
- PALM KERNEL ADULTERATION,** 299.
- Patent and Quack Medicines,** 405.
- Pharmaceutical Society and Grocers,** 308, 316, 331, 400.
- Pilsener Lager Beer,** 358.
- Pippins, Imitation of,** 407.
- Poisons: Special Shaped Bottle** 233, 390. **Accidental Poisoning,** 242.
- PROSECUTIONS: Baking Powder,** 275, 344. **Beer,** 254, 259, 292, 299, 354, 409. **Brandy,** 246, 260, 275, 284, 296, 340. **Bread,** 241, 246. **Butter,** 235, 243, 252, 261, 268, 269, 273, 275, 276, 283, 290, 293, 295, 301, 303, 307, 309, 322, 326, 327, 333, 339, 341, 342, 352, 376, 379, 381, 390, 392, 397, 401, 404, 410. **Cheese,** 252, 327. **Cocoa,** 268, 338, 361. **Coffee,** 242, 246, 252, 254, 260, 269, 275, 282, 283, 291, 294, 299, 301, 310, 326, 391, 392, 405. **Drugs,** 232, 242, 252, 262, 301, 322, 353, 393. **Fish,** 239, 242, 260, 261. **Fruit,** 239, 242, 303. **Gin,** 252, 296, 301, 303, 340, 348, 383, 390, 391. **Lard,** 235, 295, 300, 305, 316, 340, 391. **Meat,** 234, 242, 243, 260, 270, 278, 286, 292, 296, 299, 303, 364, 379, 391, 402. **Milk,** 237, 238, 243, 245, 246, 249, 250, 251, 254, 259, 261, 262, 269, 270, 277, 278, 284, 285, 289, 292, 293, 294, 295, 296, 297, 301, 302, 303, 305, 307, 311, 314, 318, 320, 324, 325, 326, 328, 331, 340, 352, 369, 378, 381, 383, 390, 401, 402, 404, 405, 401, 410. **Mustard,** 283, 300. **Pepper,** 299, 394. **Poultry,** 238, 303. **Rum,** 235, 243, 260, 269, 296, 304, 322, 409. **Soda Water,** 235, 259. **Vinegar,** 205, 242, 250, 267, 275, 299, 300, 309, 315, 317, 318, 319, 324, 328, 331, 340, 347, 349, 372, 381, 388, 398. **Whisky,** 235, 236, 244, 246, 252, 259, 269, 276, 284, 296, 300, 301, 305, 322, 326, 340, 347, 348, 392, 409. **Yeast,** 235, 268, 333, 390, 405. **Prize Newspaper Ignoramus,** 331. **REPORTS, Food and Drugs Act,** 232, 234, 238, 248, 256, 268, 286, 297, 325, 344, 361, 364, 376, 383. **Reports, Market,** 271, 278, 287. **Rochdale, Food Supply of,** 239. **SAMPLES: Dr. Teed on Taking,** 362; **Assault,** 396. **Sanitary Officer, Alleged Bribery of,** 282. **Sausage Revelations,** 291, 301. **Sir Andrew Clark, Death of,** 339. **Soap Makers, Facts for,** 288. **Soda Water,** 232. **Somerset House: Report,** 282; **Analyses, Stipendiary on,** 287; **Incompetence,** 326; **More Genius,** 332; **Peculiar Certificates,** 382. **Soothing Syrup causes death,** 291. **Southport and Shrimps,** 281. **Spirits: Excess Water in,** 353; **Law and Adulteration,** 353, 404; **Whisky Trade and Agricultural Depression,** 406; **Whisky,** 409. **Stead, Mr. W. T.: Drunk Cure,** 249; **Humbug,** 322; **Trading on a Convict's Misery,** 360; (See also Leading Articles.) **Streatham and the Wandsworth Board,** 241. **Sunday Trading, Convictions,** 396. **TEA IMPOSTURES,** 396. **Tinned Foods, Poisonings by,** 248, 282, 294. **UTILIZING Waste Product,** 383. **VAPORIZER, Dr. Coulter's,** 356. **Vinegar,** 239, 308, 334, 336, 343, 354, 359, 361, 388, 393, 399, 401. **WATER: Somerset House and Analysis,** 315; **Bacteriological Examination,** 325. **Warranty Gives,** 351, 364. **Weight, Unfair,** 336, 379. **YEAST Adulteration,** 233, 322, 390.

Chafed Skin, Piles, Scalds, Chilblains,
Chapped Hands, Neuralgic and Rheumatic Pains,
Sore Eyes, Ear-ache, Cuts, Sunburn, Insect Bites
or Stings, Throat Colds, and Skin Ailments

QUICKLY RELIEVED BY USE OF

CALVERT'S CARBOLIC OINTMENT,

Large Pots, 13½d. each, with full Instructions.

Court Circular says: "We cannot too highly recommend Calvert's Ointment. It is the best general Ointment with which we are familiar, and ought to be a stock remedy in every household."

Private report from Limassol Cyprus: "I have never found anything to come up to it for neuralgic 'Rheumatic Pains.'"

Samples sent Free by Post on receipt of value.

F. C. CALVERT & CO., MANCHESTER.

Awarded 60 Gold and Silver Medals and Diplomas.

DISINFECTION WITH "SANITAS."

A very careful investigation just made by Dr. A. B. GRIFFITHS, proves that "**SANITAS**" DISINFECTANTS, readily kill all Disease Germs, including the Microbes that cause

CHOLERA, FEVERS & DIPHTHERIA.

"SANITAS" DISINFECTANTS

are Fragrant, Non-poisonous, and do not stain. They embody all the healthful principles of Pine and Eucalyptus Forests, and are the best for general use.

Copies of Dr. GRIFFITHS' REPORT, together with full particulars of

"**SANITAS**" DISINFECTANTS & "**SANITAS**" APPLIANCES

Will be sent free on application to

The "SANITAS" Company, Lim., Bethnal Green, LONDON, E.

Food and Sanitation.

SATURDAY, AUGUST 12, 1893.

NOTICE.

All communications for the Editor to be addressed to the Editor, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

CHEAP JAM ABOMINATIONS.

SEIZURE OF ROTTEN FRUIT IN NORTH LONDON.

INSPECTORS will do well to keep a sharp watch on a certain class of jam and pickle factories. In addition to the use of the poisonous colourings upon which we commented last week, some of the makers are using fruit of the filthiest and most dangerous character. The vigilance of the Islington Sanitary Authorities discovered such a factory in North London, and a seizure was made on Saturday last of several tons of fruit in a revolting state. Three van loads of tinned pineapples, quite rotten, were seized, along with some tons of apples, gooseberries, oranges, lemons, raspberries, currants, plums, onions, walnuts, &c., the bulk of which were putrid. A strange find was a quantity of plum stones, dirty, as if gathered in the streets. When it is known that plum jam very often contains no plums, but is made of other materials, marrow, apples, &c., the discovery of a separate supply of plum stones is significant. Whilst the Islington Officials are thus alert in safeguarding the public health, some other London authorities, within whose jurisdiction lie many jam factories, appear to carelessly close their eyes to the abominable masses that are being made into jam. In this Islington case a portion of the fruit

seized was green by contact with copper, and the manufacturer appeared to regard the revolting putridity as being, not only harmless, but everything that could be desired, as he said that "skimming the putrid surface from the jam would make it all right." It ought to be remembered that unsound fruit is one of the most dangerous of foods, and with such strong temptations, as there are existing to use it, the Sanitary Inspectors, who do not regularly inspect factories and note the character of the fruit that is being converted into jam, neglect an important and necessary duty. Last Summer, one cargo of fruit from a cholera stricken port was worked up into cheap jam, and a portion of the fruit caused a death by cholera in Cambridgeshire. The use of fruit such as that seized at Islington, cannot be other than dangerous in the extreme, especially to children who are the greatest jam eaters.

THE USE OF COLOURINGS IN FOOD STUFFS.

By the courtesy of Mr. A. H. Allen, past president of the Society of Public Analysts, and author of "Commercial Organic Analysis," we are able to give our readers some further facts as to aniline dyes as colourants in food, taken from an article on the subject by Mr. Allen in *The Journal of the Society of Dyers and Colourists* for December, 1892:—

"When the products commonly known as 'aniline dyes' were first produced, they received an obvious application for colouring fibres, but a long time appears to have elapsed before they found any considerable application as colourants of articles of food. Their use for such purposes was probably retarded by the fact that one of the first manufactured and most extensively used of them—magenta—was for a long time prepared by the aid of arsenic acid, and medical men and others, possessing a smattering of chemical knowledge, were fond of demonstrating their analytical skill by applying some simple test for arsenic to fabrics dyed therewith.

"Arsenic was formerly present in magenta, in considerable proportion, as much as 6½ per cent. having been met with, and hence the colouring matter was certainly unfit for colouring confectionery, wine, syrups, &c., and its use for such purposes is absolutely forbidden in some countries; but it is doubtful whether the presence of arsenic was ever really the cause of the eruption said to have been produced by stockings and other articles of clothing dyed with magenta. Of late years, magenta has been produced by processes not involving the use of arsenic acid, and any objection based on the presence of arsenic as an impurity no longer exists. Meanwhile, magenta itself has been to a great extent superseded by other colouring matters possessing special advantages, either in facility or cheapness of production, fastness, or applicability to particular fibres.

"The rise and development of the manufacture of azo and benzidine dyes are notable instances of this 'survival of the fittest,' and the same principle is true of the application of coal-tar dyes to the colouring of food as to their use for the more legitimate purpose of dyeing fibres.

"T. Weyl, to whom chemists are indebted for much of the existing information respecting the physiological effects of coal-tar dyes, and a translation of whose collected work has just been published in America, states that commercial dinitroresol is employed as a yellow colouring matter for butter, margarine, vermicelli, and confectionery, and he found it poisonous to rabbits. On the other hand he states that Martius' yellow (a salt of dinitronaphthol) and the 'butter-yellow,' which is the product of the reaction of diazotised aniline or dimethylaniline, is not poisonous to rabbits, though small doses of the former colouring matter proved fatal to dogs. Martius' yellow has also been used for colouring mustard and adulterating saffron, for which applications it is clearly unfit. Picric acid is alleged to have been formerly used for imparting a bitter taste to beer, and it certainly formed an ingredient of a well-known 'hop substitute.'

"A year or two since colouring matter nearly related to methyl orange was found to be employed for 'improving' beetroot sugar, so that it might be mistaken for real Demarara raw sugar from the sugar cane, and to justify the sale of this product as 'Demarara sugar' it was sent out there and reimported. This ingenious practice found a defender in a well-known chemist, who argued that all kinds of sugar were artificially coloured in some manner, and if the vendors of one kind of sugar were to be punished for introducing a harmless colouring matter (which is by no means proved to be true of the dye used, the exact nature of which its apologists decline to disclose), then the sellers of all other kinds of sugar would be equally liable to prosecution. In employing this argument the user appears to have forgotten that he was defending a gross and palpable fraud, very different from the accepted and universal practice of adding a minute proportion of ultramarine to sugar to neutralise the otherwise unavoidable yellowish tinge.

"Another ingenious inventor has tried to replace the ultramarine by a coal-tar dye, but with indifferent success, for the colouring matter employed was so badly chosen that on adding the sugar to lemon or gooseberry juice, or other liquid of acid reaction, the colour became so much intensified as to render the whole mixture a distinct blue. Aniline blue and indigo-carmin have been used for colouring syrup of violets, while dyes of the eosin class are employed for giving a pink colour to lozenges and confectionery. Congo-red is

employed for colouring the skins of sausages and saveloys, and is said to possess special advantages for this purpose, while an artificial caramel is now prod used from a mixture of starch-glucose and naphthol-brown.

"Many of these applications of coal-tar dyes are probably harmless, and may ultimately come to be recognised as legitimate, but the unacknowledged use of artificial colouring matters, the physiological action of which is wholly unknown, or at most has been but imperfectly studied, is to be deprecated, even in cases where the proportion of colouring matter employed is very small; and there are instances among and analogous to those above-mentioned where the colouring matter is used in no insignificant quantity, and for a purpose which can only be regarded as highly improper or actually fraudulent."

WHAT IS SODA WATER P

The veteran apostle of twaddling "Telegraphese" has spoken and furnished our contemporary *The Pharmaceutical Journal*, with one of those opportunities it so dearly loves of lecturing the Public Analyst. It is the first time we have heard that the opinions of *Sala's Journal* on any question whatever were worth printing, and we suspect in this instance it was not that the *Pharmaceutical Journal* regarded the Snippet's persiflage as of any value, but that it seized what it conceived to be a golden opportunity to run amuck at Analysts and Inspectors. Our Contemporary says:—

"Referring to the recent prosecution of a chemist and druggist by the Camberwell Vestry, for the sale of soda water alleged to be deficient in strength, *Sala's Journal* comments upon the fact that, though the defendant was successful, he was not awarded the costs he had been compelled to incur. The magistrate refused costs on the ground that the Vestry had only performed a public duty, but it is urged that costs ought to follow results in cases of this character. 'A public body may be only endeavouring to do its duty, but there is the other side of the picture—the struggling tradesman incurring heavy expenses in order to preserve his good name and disprove the accusation brought against him.' It might have been added that the case was brought against him unwarrantably, for, as we pointed out last week, there is no ground whatever for assuming that the authority of the "British Pharmacopoeia" extends to dietetic articles, or controls their composition. It is simply an authoritative guide as regards drugs and their medicinal compounds when these are prescribed by a physician. Other important features of the case were the positions taken by the Public Analyst and the Inspector respectively. The former, as we understand, practically instigated the prosecution, by stating in his certificate that the water contained but a grain and a half of sodium bicarbonate, whereas it should have contained thirty grains to the pint. Now the strict duty of a Public Analyst requires only that he should state the results of his analysis, and it should be regarded as a distinct breach of professional decorum to go beyond this and suggest, ever so indirectly, that the seller of an article should be prosecuted. The too common spectacle, nowadays, of Public Analysts attempting to assume a sort of dictatorship needs to be checked, or the resulting condition of things may become unbearable to even the most straightforward of tradesmen. Above all, Public Analysts must be taught that the proper performance of their duties does not of necessity require them to attempt to usurp for the "British Pharmacopoeia" the position of a universal standard of quality. This lesson should be learned, too, by the Inspector whose opinion, judging from his evidence, is that a chemist and druggist must sell nothing except it be of the B.P. standard of quality, though any other tradesman may exercise his discretion and supply what he thinks fit. The absurdity of this position is too obvious to require any comment, save that chemists and druggists will do well to strenuously resist all such attempts to limit their rightful liberty of action."

We do not know that any capable Public Analyst regards the "British Pharmacopoeia" as an authority upon anything. We do know many who regard it as being what it is, loose, inaccurate, incomplete, and fostering abominations innumerable in drug adulteration. When the Pharmaceutical Society and its journal do something to remedy this state of things, and it becomes possible to punish and prevent drug adulteration, Public Analysts may heed its upbraidings. As matters stand at present, we would not be surprised if they regarded the *Pharmaceutical Journal's* lecture as a piece of colossal effrontery.

THE SURREY COUNTY COUNCIL AND COMBINED APPOINTMENTS.

At the last meeting of the Surrey County Council, a series of resolutions passed by the Society of Public Analysts—including one "That the compulsory combination of the two offices of Medical Officer and Public Analyst is, in the public interest, undesirable"—were considered, and the General Purposes Committee recommended the Council to pass like resolutions, believing them to be of a nature deserving the support of local authorities. The Council agreed to support the resolutions.

COLEMAN'S LIEBIG'S EXTRACT OF MEAT AND MALT WINE.

At Maxwelltown, on July 27th, Mr. Stewart, druggist, Castle-Douglas, was charged at the instance of the Board of Inland Revenue, and pleaded guilty to selling a bottle of foreign wine to a Revenue officer. It was stated that the article was Coleman's Wincarnis, or Liebig's extract of meat and malt wine, and that on analysis at Somerset House it was found to contain 42 per cent. of proof spirit—was simply mere wine with an admixture of flavouring matters. Mr. Stewart explained that it was not sold as a beverage, and being frequently prescribed by the faculty he now found it necessary to keep a few bottles in stock. It was not kept by licensed grocers. In answer to Sheriff Lyell, Mr. Hawley, collector of taxes, said though this was the first case in court, it was not the hundred and first case that had been before the Commissioners, and druggists knew they were not entitled to sell the article. A fine of £1 was imposed.

MORE "MEAT EXTRACT" REVELATIONS.

John Glaholm, Newcastle, is a cab proprietor, and apparently also a purveyor of "knacker's perquisites in the last stage" to Continental Meat Extract manufacturers and Hollandische Delicatessen concocters. Mr. Glaholm appeared at the Newcastle Bankruptcy Court before Mr. Registrar Ingledew for his first examination. He said he had been in business ten years as a cab proprietor. The debtor, in answer to questions, said he had lost a lot of money by sending horses to Antwerp. The horses were sent there to be made into polonies and extract of meat. The debtor remarked, "What is there cleaner than a horse? If you get a pig—" The Registrar: Don't argue. The debtor, continuing, said he lost about £80 on one batch of horses he sent to Antwerp. The animals became sea-sick, and died on the passage. The people at Antwerp would not take dead horses. The Registrar: The animals were in the last stage. The debtor said he had gone into a place at Antwerp and seen thousands of horses hanging up to dry to be made into polonies and beef extract. The Registrar: Half the world does not know how the other half lives. The debtor: In Antwerp they eat nothing but horses. The representative of a creditor present said the debtor had represented he could make a profit by sending horses to Antwerp for meat, while his accounts showed he had suffered a loss on the transactions. The debtor's filed statement of accounts showed gross liabilities amounting to £197 7s., and assets estimated to produce £80 15s. 4d., leaving a deficiency of £166 11s. 8d. He attributed his insolvency to accidents to cab horses and heavy interest on borrowed money. The examination was adjourned for a week. We have no objection to Mr. Glaholm's business, but we have a very strong objection to these German and Dutch extracts of used-up horse being sent to this country, and sold as Extract of Beef; and our readers would be wise to shun continental trash, and buy only such extracts as are announced in our journal, all of which we have had carefully analysed, and can vouch for their genuineness.

THE WOOLWICH ANALYST AND MR. JOHNSON'S CASE.

Mr. John Johnson has written a letter saying:—
"I have no doubt but what you have heard about my action with the Woolwich Local Board's Analyst stating the sample of milk taken from me on December 12th, 1892, contained 20 per cent. of added water. I first took my sample to Professor Redwood, and it came back right, and by order of the Magistrate I sent it to Somerset House, and it was returned right from there. The Bench allowed me £1 1s. costs and 12s. 6d. and 7s. 6d. for Somerset House and Professor Redwood. I have entered an action for damages. On the Board's application last week before the Hon. Wm. Butler at the Royal Courts of Justice they were defeated, and the Board's counsel asked for fourteen days to prepare defence. They were allowed ten days. I am surprised some of the large dairymen have not taken such an important case up, as it concerns us all. However, I shall see it out now without help. Trusting you will make a note of it in your valuable journal.—I am, Sir, &c.,
"JOHN JOHNSON."

"Model Dairy, 188, Powis-street,
Woolwich, Kent, July, 1893."

THE SANITARY CONDITION OF GRIMSBY.

At the quarterly meeting of the Grimsby Town Council, on August 1st, Mr. H. F. Moody, Junior Sanitary Inspector, reported that for the quarter ended June 30th, five visits to premises to examine meat intended for food had been made, some 35 stones being condemned as unfit for food, and destroyed. Samples of gin, whisky, vinegar, lard, pepper, mustard, condensed milk, cows' milk, and water had been procured, and submitted to the Public Analyst for analysis, the water being certified as of good quality. Proceedings have, by the order of the Authority, been instituted under the Food and Drug Act against five persons for selling adulterated articles, and a prosecution for exposing for sale unsound meat had been instituted and the offender convicted. During the quarter, the Inspector had accompanied the Medical Officer in his inspection of the sanitary arrangements of the schools (public and private) in the borough. By the instruction of the Medical Officer, premises to the number of 84, where infectious disease had broken out, had been visited, and the sanitary arrangements in each case been closely examined. Seven rooms had been fumigated after fevers, and some bedding burnt, and the rest of the bedding removed to the disinfectant at the hospital for treatment.

MORE OUTSIDE ANALYSTS' FREAKS IN DUBLIN.

Mr. McSheehy, Law Agent to the Corporation, summoned Donald Monroe, 73 Coombe, for having on the 13th of June sold margarine as butter. The case had been before the Court on the previous day, when the defendant challenged the accuracy of Sir Charles Cameron's analysis. Sir Charles certified that the sample sent to him contained at least 20 per cent. of foreign fats other than butter. For the defence, Dr. Campbell, of Kenilworth-square, Rathmines, certified that a sample sent to him to be analysed was pure butter. This sample, the defendant alleged, was part of the same as Sir Charles had analysed. The defendant elected to send a portion of the substance taken by the Food Inspector to Somerset House. The case stood for the report from Somerset House. The report stated that the sample contained not less than 18 per cent. of foreign fats other than butter. This report was signed by Drs. J. Bell, G. Laurie, and J. Cameron, Somerset House. The Magistrate convicted the defendant, and in doing so said that the citizens of Dublin should be congratulated on having such an officer as Sir Charles Cameron, who in his opinion, in these cases was in an unassailable position. He thought also that the Corporation should be congratulated on having such an efficient officer as Sir Charles. He fined the defendant £5, and £2 2s. costs.

PROF. MACFADYEAN ON MEAT INSPECTION.

Professor Macfadyean says that, with the single exception of meat rendered dangerous by post mortem change, the unwholesomeness of flesh is the consequence of disease in the animal furnishing it. Hence the inspection of meat mainly resolved itself into a search for the lesions or marks of particular diseases of the lower animals. Who was the proper person to conduct this search? Not, surely, the policeman, nor the butcher, nor medical officer, but the veterinary surgeon. Inspection before slaughter was nowhere carried out in this country. The slaughter of animals in public abattoirs ought to be conducted in the presence of an Inspector. Everyone who had any experience in connection with meat inspection knew how quick and skilful butchers were in disposing of evidences of disease when the Inspector's back was turned. The so-called meat inspection, which consisted in looking at the dressed carcasses after the butcher had completed his day's work, when most or all of the viscera had been put out of the way, deserved to be characterised as a huge deception.

THE NEED FOR A SPECIAL SHAPED POISON BOTTLE.

On Monday, July 31st, an inquest was held by Mr. Dossy Wightman, at the Rockingham Arms, Wentworth, on the body of Wm. Shillito (74), of Lee Cottages, who died from the effects of poisoning, on Friday morning. Mrs. Shillito, the widow, said deceased had been in the service of Earl Fitzwilliam as a gardener for upwards of 50 years. On Thursday evening, about six o'clock, he was brought home ill and wanted to go to bed. He said he went into the mushroom shed to have a drink, and drank out of the wrong can, which contained "weed destroyer." He got gradually worse, and witness sent for Dr. Barr, who gave him an emetic, but he died at 12 o'clock. Wm. Totty, foreman gardener to Earl Fitzwilliam, said the liquid deceased drank of is known as Bentley's "weed destroyer." Witness put it in the mushroom shed about a fortnight ago. The deceased was there, and he told him it was poison. The liquid was about the same colour as beer, but as far as he knew there had been no beer in the shed. The deceased had no business there, and it had never been his duty to interfere with this can. By a juror: If any one had beer anywhere in the gardens this would be one of the most likely places. Mr. Hughes, head gardener, said the principal ingredients in the weed destroyer was arsenic, and the liquid deceased drank was the sediment out of one of the casks, and had not been diluted, as it had to be before using on the paths. The jury returned a verdict that the deceased died through drinking inadvertently of the poisonous liquid in question.

MORE TINNED MEAT POISONING.

An inquest was held at Aston on August 3rd, touching the death of Evaline Betts, aged three years. On the previous Sunday the child partook of tinned rabbit, became ill with vomiting and purging on Monday, and died the same evening in great agony. Dr. Holmes, who attended the child before death, and afterwards made a post-mortem examination, found that death had resulted from a peculiar form of poison, known as ptomaine, developed by decaying animal matter. He had some of the tinned rabbit submitted for his inspection, and found that the tin had been perforated near the bottom, and that the meat, which smelt very badly, was very putrescent near this. He could not understand anyone eating from the tin without knowing that it was bad. The jury returned a verdict to the effect that the child had been accidentally poisoned by eating the tinned rabbit.

DIRTY MILK CANS.

At the Bradford Borough Court, on August 1st, Joseph Saltonstall, of 15, Paisley-street, was summoned for breaches of the regulations relating to the sale of milk. The Town Clerk (Mr. W. T. McGowen) stated that, as the Bench knew, nothing was more dangerous than the use of contaminated milk. The defendant was not so clean as he might be, and his vessels were not kept as the regulations required they should be kept. If these regulations were neglected, very serious consequences might arise; indeed, no one could tell what the end would be. In Bradford recently, within a short distance of the Town Hall, thirty persons were taken ill in one day, and ninety during the next, and inquiry showed that there was something wrong with the vessels from which the milk consumed by these persons had been delivered. In this case it would be shown that although the defendant had been before the Sanitary Committee and warned to be careful about his vessels, the warning had been useless. On the 18th of last month the defendant's son was found with a milk vessel in his possession which was in a most unclean condition. An officer inspected the vessel, and found that there was rime adhering to the sides. When he took some of it off he found that it had a most offensive smell. After explaining the regulations on the subject, and observing that they required milk cans to be cleansed with boiling water every morning and every evening, the Town Clerk said he need not point out how necessary it was that the regulations should be strictly observed. The defendant had admitted that on the day when the Inspector saw the cans they had not been properly cleansed. He (the Town Clerk) was sure the Bench would forgive him for pressing the case on behalf of the Sanitary Committee, and asking them to see that the law was carried into effect. Inspector Rhodes stated that on the 18th of last month he was making his usual inspection of milk vessels. When in Ashley-street he found the defendant's son delivering milk, and upon examining the can saw that the seams were covered with sour or congealed milk. He examined all the vessels which the defendant was using both in and out of the cart, and found that they were in the same condition. The stuff had a very offensive smell. He saw the defendant, who admitted that the cans had not been washed that morning. This was the Town Clerk's case. The defendant's son, who appeared in court in the absence of his father, said that on the morning of the 18th his mother, who usually attended to the cans, was poorly in bed. The cans were left to him, and he did not wash all the "nicks" out cleanly. He did not notice the stuff that the Inspector had spoken of. He did not that morning wash the cans with boiling water. The Magistrates felt bound to make an example which should act as a warning not only to the defendant, but also to other persons engaged in the milk trade. The defendant was fined £5 and 8s. cost, with the option of one month's imprisonment.

THE INFLUENCE OF FOOD ADULTERATION ON HEALTH.

Dr. Hill (Medical Officer of Health, Birmingham), read a paper on "The Influence of Food Adulteration on Health," at the meeting of the British Medical Association, on August 4th. The writer specified the most important articles of food, drink, and drugs, and described the manner in which they are sometimes adulterated. He dealt with milk, bread, and flour, cocoa, coffee, wine, vinegar, and alcohol; while among drugs he included milk of sulphur, sedlitz powders, citrate of magnesia, saffron, castor oil and soda water. Of the examples of drugs he examined last year, 127 in number, 27 per cent. were adulterated. Mr. J. Spottiswood Cameron, Leeds, moved, "That in the opinion of this meeting of the Incorporated Society of Medical Officers of Health, no milk should be allowed to be sold as new milk which contains less than 12 parts per 100 of solids, and of which 12 parts not less than 3 should be butter fat." Mr. Mason, Hull, seconded the resolution, which was carried. Mr. J. Spottiswood Cameron further moved, "That the Council of the Society be asked to take measures to bring the foregoing resolution before the Local Government Board, and to urge upon the Board the desirability of further legislation securing purity of milk." Sir C. Cameron, Dublin, seconded this resolution, which was also carried.

GERMAN AND DUTCH YEAST SWINDLES.

The myriad forms adulteration takes are as bewildering as they are unsuspected by the ordinary consumer. When detected, however, and grocers have their attention called to the fact that dangers lie in selling certain classes of goods, the retailer is a fool who does not take precautions to avoid the danger of prosecution. We therefore desire to call the attention of grocers to the fact that there is great risk run in selling the Dutch and German yeast at present offered to the trade. In another column our readers will find a report of a prosecution for Dutch yeast adulterated with 50 per cent. of farina. In this instance the penalty was small. It is scarcely likely to be so in future cases. Readers who took our advice re acetic acid as vinegar have cause for thankfulness. They will have equal cause for congratulation if they avoid farina in Dutch yeast.

ADULTERATION APPEALS.

At Glamorgan Quarter Session, on July 25th, before the Chairman (J. Cooke Fowler), and the vice-Chairman (His Honour Judge Gwilym Williams).

FRY'S COCOA.

The statement of the case to be sent to the Higher Court, in the appeal Jones v. Jones, was presented to the Chairman. In this statement Mr. Rhys Williams (instructed by Mr. Cross, Bristol), on behalf of the appellant, objected to various amendments that had been made by Mr. Stephen (instructed by Mr. Allen, Cardiff), on behalf of the respondent. The appeal has reference to Fry's Pearl Cocoa, which originally came into court as an alleged adulterated article under the Food and Drugs Act, and the amendments having being discussed, and in some cases varied, the Court accepted the statement.

DAVIS v. DAGG—WHISKY.

The statement of the case to be sent to the Higher Court, in the appeal Davies v. Dagg, was next presented to the Court. Mr. W. D. Benson intimated, in reply to the Chairman, that he and his friend Mr. Rhys Williams, were not quite agreed upon some of the clauses, and at once proceeded to read the statement, which stated, at the outset, that the appellant, George Davies, landlord of the Colliers' Arms Inn, Caerphilly, was convicted of selling adulterated whisky at the Petty Sessional Court on December 10th last. This decision the Court of Quarter Sessions upheld, though permission to state a case was granted. Mr. Rhys Williams represented the appellant, and Mr. W. D. Benson represented the respondent, Police-Sergeant Dagg acting as one of the Public Analyst Inspectors. Each of the paragraphs in the statement of the case having been separately discussed and amended, the Court accepted it as revised.

BAKING POWDER.

The respective drafts, submitted by the appellant and respondent in the recent baking powder appeal case, were next presented to the Court. The only counsel engaged in the case present in Court was Mr. Rhys Williams, who represented the respondent. Police-Sergeant Jones, acting as one of the Public Analyst Inspectors, Messrs. Tillet and Co., solicitors, Norwich, who instructed counsel for the appellant, Mr. James James, a Rhondda grocer, were in attendance, and a member of this firm asked to be allowed to explain the unavoidable absence of Mr. Brynmor Jones, Q.C. As this was against the rules of the Court, the Chairman could not allow the application. Mr. Rhys Williams thereupon rose and said that, as there was no appearance on the other side, he would ask for costs, and that the case be put an end to. Before a reply could be given, Mr. W. D. Benson, after having been spoken to by the solicitor representing Messrs. Tillet and Company, said he had just been instructed to appear for the appellant. The Chairman intimated, however, that as the two statements submitted did not agree, the Court would state the case themselves. Mr. Benson: Then you will take it that the two sides have not been able to agree upon a case, and that being so, you take upon yourselves to state it. The Chairman: Yes, according to the practice adopted at the Quarter Sessions. The matter, it will be remembered, has reference to an alum baking powder known as the "Exelsior" baking powder, which was held, both at the petty sessions and afterwards by the Court of Quarter Sessions, to be an article of food injurious to health under the Food and Drugs Act. The case, however, is not definitely settled, as it will come before a higher Court.

PUTRID AND MAGGOTY SALFORD BACON.

At Salford, on August 4th, George Henry Radcliffe, provision dealer, 78, Regent-road, was summoned for exposing for sale in his shop hams and bacon unfit for food. Mr. Holmes prosecuted. Mr. A. W. K. Fordham, meat Inspector for the borough, said that on the 15th July he visited the defendant's shop, and seized 76lb. of bacon and ham, which was totally unfit for food. The bacon had a bad smell, and was maggoty and putrid. The Stipendiary Magistrate said the case was a very bad one, and the defendant, who is quite a young man, did not seem to realise the gravity of the offence he had committed. He questioned whether it was not his duty to send him to gaol without the option of a fine. Defendant was fined £20 and costs, or three months' imprisonment.

CORK MAGISTRATES AND FRAUD.

In the opinion of Messrs. T. P. Stammers, J. Flynn and Eyre Powell—Cork Magistrates—an adequate punishment for defrauding the purchaser of fifteen per cent., by selling him that quantity of water at the price of whisky, contrary to an Act of Parliament, is a fine of 5s. and costs. This kind of stupidity, encouraging as it does plunder of the public, is found everywhere throughout Ireland, and seems to show very clearly that whatever else Ireland needs she needs an enquiry into the fitness of her magistrates for their functions, and the removal from the Bench of Nupkines who make the law a farce, and foster fraud, which ridiculous decisions like that of these gentry must of necessity do.

NOTTINGHAMSHIRE COUNTY COUNCIL.

At their last meeting a report of the County Analyst was submitted showing that there had only been 21 samples received for analysis: milk, 10; spirits, 6; butter, 3; sweets, 2. Four samples of milk were adulterated, and two others were exceedingly poor. All the spirits were adulterated beyond the limits. The butter and sweets were genuine. This County Council has long been a disgraceful one in practically stultifying the working of the Food and Drugs Acts, and thus encouraging foreign free fraud in food stuffs.

REFUSING TO SELL TO AN INSPECTOR FOR ANALYSIS.

THE MONEY NOT ACTUALLY TENDERED, AND THE PROSECUTION FAILS.

The following case is an important one for Inspectors under the Food and Drugs Acts, and for butter factors. It shows how well grounded are the complaints we receive regularly from Ireland, that Food and Drugs Act Inspectors are expected to make bricks without straw. They are not, as English Inspectors are in hundreds of cases, supplied with copies of our journal by their authorities, by which they would be informed of all such technical points, equipped to meet legal chicanery, and, in fact, thoroughly posted in all relating to procedure, hence failures of justice like the four cases here recorded. As Irish local authorities have the Constabulary Inspectors' services given them gratis, the least they might do would be to supply them with the journal that deals with their work. It would save them money to do so.

At the Kilrush Petty Sessions, Acting Sergeant Keane, Inspector under the Food and Drugs Act, prosecuted John Gorman for having refused to sell him, in his capacity as Inspector, a sample from a firkin of butter, which he had for sale in the weekly butter market, and which was demanded from him for the purpose of analysis. The summons was brought under the 17th Sec. of the Food and Drugs Act which provides a penalty of £10 in case of conviction. The Inspector stated he demanded 1 lb. of butter from the defendant, who had a firkin, presumably for sale in the market, telling him at the same time that he was an Inspector under the Food and Drugs Act, and required it for the purpose of forwarding it to Dr. Cameron for analysis. He tendered him the current price for 1 lb. of butter, either 10d. or 1s. He refused to give him a sample, but offered to sell him the entire firkin, an offer of which he (the Inspector) could not agree to. To Mr. Kelly, who defended—He remembered Gorman saying something about exposing his butter in the public scale in the weigh house if there was a suspicion that there was anything wrong about it. A butter buyer named Bulger, afterwards came up, but he had left the car at the time. Bulger might have offered him a sample of Gorman's butter, but he (witness) considered that was not enough. Mr. Kelly, with the regulation cheap impertinence of the country joskin, here ejaculated: Oh, of course, you considered you had secured a conviction, and went your way rejoicing. Cross-examination continued: He noticed Mr. Bulger near the defendant's car at the time, but could not say if he was in the act of buying his butter. The Chairman questioned the Inspector as to the manner in which he tendered the price of the lb. of butter demanded. Witness in reply, stated that he had made the demand for the butter in the way he had already described, and told the defendant he was willing to give him the value of the lb. required. He had not the money in his hand at the time. The Chairman, after a brief consultation with the other Magistrates, said the Act under which the prosecution was brought was a very stringent one, and its requirements should be strictly carried out. It would not do for the Inspector, when he tendered the price of the sample demanded, to have the money in his purse in his pocket, or even to have his purse in his hand, but it was required that he should have the money in his open hand at the time the sample was asked. In this case they considered the tender for payment was defective, and on these grounds the summons would be dismissed. The same ruling was made in similar charges against Simon Driscoll, John M'Mahon, and Catherine Dillon, where the Inspector admitted the "tender" was made in the same manner as in the previous case.

REFUSING TO SELL FOR ANALYSIS.

At Miltown-Malbay Petty Sessions, Acting-Sergeant Clinton summoned Pat Murrihy, John Curtin, Pat O'Brien and P. Mungoven. The Sergeant stated that on the 4th May last, each of the defendants had butter for sale at the Miltown-Malbay butter market, he demanded 1 lb., offering the price, for the purpose of analysis, but was refused. Mr. Higgins, solicitor, stated to the Court he appeared for the defendants on the first occasion this case was brought, and his objection was that the Inspector was not properly appointed under sec. 13, the case being brought under sec. 17 of the same Act, and he was not entitled to demand a sample for analysis. It appeared that the Grand Jury are the authorities who have the power of appointing Inspectors to put the Act into force, and that Sergeant Clinton was not appointed in accordance with the statute. Chairman, Mr. Kelly, County Court Judge, denied that on the appeal case. Mr. Higgins said these men had gone to the expense of defending themselves and this was the third day lost by attending court. A nominal penalty would meet the ends of justice. Mr. Murrihy, told the Court he had been sick for the previous 6 months before, and this was his first day out in the market, and he knew nothing about it as he was ignorant of the law. Mr. Curtin stated he also was ignorant of the law, or he would not have refused. Chairman: We have considered this case, and as you have been here on three occasions we will reduce the original fine of 21s. and costs to a fine of 5s. each and costs.

READING.

The quarterly report of the Public Analyst (Dr. Ashby) stated—During the quarter ended 30th June ten samples of milk and two of skimmed milk were submitted to me for analysis by your Inspector. The samples of skimmed milk and seven of the samples of milk were genuine. One sample of milk was poor in fat; one was adulterated by the addition of not less than ten per cent. of water to milk from which not less than 41 per cent. of the fat had been abstracted; and from one not less than 20 per cent. of the fat had been abstracted.

SODA WATER.

MR. BIRON AGAIN.

At the Lambeth Police-court, on July 28th, Eugene Compigne, of 262, Camberwell-road, was summoned, at the instance of the Camberwell Vestry, for selling soda water containing one and a half grains of bicarbonate of soda to the pint, instead of 30 grains to the pint, and therefore not of the nature, substance, and quality demanded by the purchaser. Mr. G. W. Marsden, solicitor to the Vestry, appeared in support of the summons, and Mr. Ivor Bowen, barrister, represented the defendant. William Edwin Groom, an Inspector appointed by the Vestry under the Food and Drugs Act, stated that on the 18th June he purchased a bottle of soda water from the defendant, who was a chemist. He asked for soda water. He produced the Analyst's certificate, showing that it only contained $\frac{1}{2}$ grains of bicarbonate of soda to the pint instead of 30 grains.

Mr. Bowen: What kind of soda water do you drink as a rule—

"BRITISH PHARMACOPOEIA" STRENGTH?

(Laughter.) Witness: I cannot say. I expect to get proper soda from a chemist. Mr. Biron: Where is the authority for saying that the definition of the "British Pharmacopoeia" is the thing you are entitled to have if you ask for soda water? Mr. Bowen remarked that it was admittedly the fact that when soda water was required for medicinal purposes the proportions should be as laid down in the "British Pharmacopoeia." If a customer went to the shop and asked for medicinal soda water he would get it, and he would be a lucky man if he was satisfied with it, because 30 grains of soda would make it very nauseous. After these proceedings the defendant rejected all the ordinary soda water and sent for a supply of soda water according to the "British Pharmacopoeia," but the result was that he received a number of complaints from customers. Mr. Biron here left off a carefully prepared impromptu to the effect that "he made his customers very unwell," and was rewarded with one laugh from the hydrocephalous barrister which so pleased the magisterial curiosity that he said the summons must be dismissed. Mr. Bowen asked for costs. The defendant had been obliged to bring down three eminent scientific gentlemen. Mr. Marsden said the Vestry were a public body, and were only endeavouring to do their duty. Mr. Biron declined to allow costs.

WHISKY AND FALSE MEASURES.

At Malmesbury County Petty Sessions, on August 1st, William Hatton, landlord of the Waggon and Horses Inn, Brinkworth, was summoned by James Ward, Inspector of Weights and Measures, charged with on the 26th June, unlawfully selling to prosecutor half-a-pint of whisky, adulterated to the extent of 88 per cent. with water, being 8 per cent. under proof; also with having in his possession for trade purposes, a measure representing one pint which was false and unjust; and further, with using a pint and half pint measures not bearing the proper stamp. Defendant pleaded not guilty. The Inspector said on the way in question he went to defendant's house and asked for half-a-pint of whisky, which was served by Mrs. Hatton from a bottle, and for which he paid 1s. 4d. He told her it was for the purpose of being analysed by the Public Analyst, when she said he had better have some out of the other bottle. He asked her what was the difference, and she replied that she put water in the one bottle for persons who liked it. He told her she was not allowed to water it beyond 25 per cent. He afterwards saw her husband, and he seemed to feel perfectly justified in doing as he had done. Prosecutor sent a portion to the Public Analyst, left a portion with defendant, and the other portion he produced, being 8 per cent. under proof. In reply to the defendant, witness said he was not told there was whisky and water for persons who came along and asked for it. Mrs. Hatton made a remark that she had watered it no more than they were entitled to. Witness went on to say that he inspected defendant's measures, and found 40 earthenware measures bearing the stamp in the bar, and he asked defendant's wife where were the pewter measures they used for the outdoor customers. She took him to the cellar, and standing on the floor were the two pewter cups produced, both containing beer. Mrs. Hatton explained that they had just tapped a barrel of beer, and it must have squirted out into the cups. There were no earthenware measures in the cellar. The beer in the cups appeared fresh. The pint cup was three drams short, but the half pint was correct though not stamped. By defendant: He was asked to pay 1s. 4d. for the whisky. James William Ward, prosecutor's son, proved seeing his father pay 1s. 4d. for the whisky. Defendant, sworn, stated that he was perfectly innocent of the offence. He told Mr. Ward when he came in that one bottle was whisky and water for customers who wanted it, at 1s. 2d. for half a pint. They only asked Mr. Ward 1s. 2d., but he said he would be a good customer to them, and chucked down the other 2d. His wife never took it up until prosecutor left the house. He asked him which he would have, and he said the whisky and water. As to the cups, he admitted they were in his cellar, but to his knowledge had never been used in his trade. The Bench were of opinion that the cases were proved, and fined defendant 80s. including costs on the first case, and 10s. in each of the other cases.

IMPORTANT TO ADVERTISERS.

As a medium for High-Class Advertisements FOOD AND SANITATION is unequalled, having a larger *bona fide* Subscription List than the whole of the Grocery Trade Journals and Sanitary Journals combined. Terms for advertisements may be had by writing to the Publisher,

FOOD AND SANITATION,
183, Strand, London, W.C.

ADULTERATION PROSECUTIONS.

DUTCH YEAST.

At East Riding Police Court, on August 1st, Annie Curtis, of Anlaby, was summoned for having sold Dutch yeast which was adulterated with 50 per cent of farina. Inspector Clarke deposed to purchasing $\frac{1}{2}$ lb. of yeast of defendant on the 12th June, and telling her he wanted it for analysis. Superintendent Harvey produced the certificate of Mr. Baynes, the Analyst to the East Riding, which was to the effect that the yeast was adulterated with 50 per cent. of farina. Mr. Baynes, who was called, said the yeast could be made without farina. This farina was a cheap potato starch. It had been the custom for many years for manufacturers to mix about 5 to 10 per cent. with yeast, as it made the yeast keep better. It was most unlikely the defendant knew the yeast was adulterated. The Chairman: Do you consider from 5 to 10 per cent. adulteration? Mr. Baynes: I should certify 5 to 10 per cent. as adulteration, because it can be made without. The defendant informed the Bench that she had been offered yeast at 9d. per 7lb. bag cheaper than this, but she preferred it is, as she thought it would be a better article to sell to the public. She got it of a yeast merchant named Robert Smith, of Hull. She did not know it was adulterated. The Clerk (Mr. Chatham) said it was a question as to what amount of farina was sufficient to make it an article of commerce. Mr. Baynes said it was not necessary at all to make yeast an article of commerce. Farina was cheaper than yeast. The Chairman remarked that according to Mr. Baynes' statement almost every purveyor of German yeast would be placed in the same position as defendant. Mr. Baynes said that was so. It would be proper if these cases could be shifted on to the manufacturers. He had had some heavy cases in Staffordshire, where they had imposed fines of £20, and had broken the neck of the thing. The Chairman: I don't know how we can get hold of these double Dutchmen—(laughter). The Chairman ultimately said they should be obliged to inflict a fine, but it would be a small one—2s. 6d. and costs.

VINEGAR.

At Liverpool, on August 2nd, a penalty of 20s. and costs was imposed on John Miller, of 48, Richmond-row, for selling as vinegar a concoction containing 90 per cent. of acetic acid.

MARGARINE.

At Liverpool, on August 2nd, for selling margarine without a label, Stanley J. Mitchell, 122, Mill-lane, was fined 10s. and costs. Inspector Baker proved the case.

At the Greenwich Police-court on August 1st, Edward F. Dry, 2, Walpole-street, Deptford, was summoned by the Greenwich Board of Works, for selling butter admixed with 90 per cent. of foreign fat. Defendant said he had only been in business a week, having bought it on the representation that the takings were £10 a week, whereas they did not amount to 80s. Fined 80s. and 2s. costs.

LARD.

At the Darlington County Police-court, on July 29th, two shopkeepers named Ruth Hodgson and Rachel Hanson, residing at Hurworth-place and Neasham respectively, again appeared to answer a charge of selling lard which the County Analyst had certified as containing 7 per cent. of beef fat. The Somerset House authorities had sent a certificate to the effect that each sample contained a proportion not exceeding 7 per cent. of a foreign fat answering to beef fat. The Principal at Somerset House had written the Magistrates' Clerk stating that with reference to the question raised in a letter he (Mr. Watson) forwarded, he had reason to believe that before and since the passing of the Food and Drugs Act, 1875, it had been the practice with some lard refiners to add a small proportion of beef or mutton fat to hog's fat, ostensibly for the purpose of giving consistency to the softer lards, but the question of that practice being allowable or not within certain limits was one for the consideration of the magistrates. Mr. Darling, Newcastle, for the manufacturers, asked the permission of the Bench to call Mr. Stock, the County Analyst, and the latter said he was not sure that beef fat was necessary in the manufacture of lard as an article of commerce. Beef fat was not injurious to health. It was cheaper than lard, and that was the reason why it was used. The Bench retired, and on returning into Court the Chairman, Mr. John Feetham, said the defendants would be fined 5s. and costs each.

RUM.

At Appleby Police-court, on July 29th, before Lord Hothfield, the Rev. H. J. H. Faulkner, and Messrs. W. Sanderson, T. W. Thwaytes, F. Chatfield, and R. B. Barrett, John Patterson, Dun Cow Inn, Coupland Beck, was charged with selling a pint of rum, which was 3-7 degrees below the legal limit, to Superintendent Graham, on the 24th May last. Superintendent Graham proved the purchase, and put in Dr. Hellon's, County Analyst's certificate, to the effect stated in the information. Mr. Graham had also purchased a pint of whisky on the same day, but that was certified to be genuine. Miss Patterson, who manages the business, stated that rum was rarely asked for in the house, and that the rum from which the pint in question had been drawn had been in the keg for three months. She further stated that a notice (produced) to the effect that all spirits sold at the house were diluted with water had been posted up for a number of years, but she had neglected to replace it after cleaning shortly before Superintendent Graham's visit. The Bench said that under the circumstances they would not convict, but defendant would have to pay 5s. 6d. costs.

At the County Police-court, Wigan, on August 4th, Richard Baxter, landlord of the Victoria Hotel, Platt Bridge, was summoned for selling to Mary O'Neill, of 1, Harrogate-street, Wigan, one pint of rum which was adulterated. Mary O'Neill stated that on the 18th July she accompanied Police Sergeant Scott to Platt Bridge, and witness visited the defendant's house and asked for a pint of rum. She was supplied by defendant's daughter, and Police Sergeant Scott then came in and took possession of the bottle in the presence of the defendant's daughter. In answer to Mr. G. S. Bolton, who appeared for the defendant, witness said the defendant's daughter tried to draw the rum from a keg, but it would not run. She then supplied the rum from a decanter. Police Sergeant Scott said the last witness handed the bottle to him, and he sealed it in the presence of the landlord, and took it to the Public Analyst, at Liverpool. By Mr. Bolton: The defendant had been the landlord of the house for about ten years, and samples had been taken frequently. The Analyst's certificate showing that the rum was 44 degrees under proof was handed in by Superintendent Brassington. Mr. Bolton said there was no doubt there had been gross adulteration, but he had an explanation to make on behalf of the defendant, and to say there was not the slightest intention to contravene the statute. The whole thing was a mistake, and he would be able to show that the daughter did not know what sort of stuff she was supplying. The defendant kept his spirits in a number of kegs behind the bar counter, and underneath there were a number of decanters which contained adulterations or weak solutions of different spirits, the only use these were put to being to garnish the bar, and to give it an attractive appearance. On Wednesday night the rum keg had run dry, and the defendant took it down to clean it, and taking one of the "dummy" decanters he emptied the liquid out, put some rum in it, and told his wife and daughter to serve out of it. He cleaned the keg and refilled it, and replaced the adulterated stuff into the decanter, but omitted to tell his wife and daughter that he had done so. When the daughter served O'Neill she tried to draw the rum from the keg, but it would not run, so she supplied the stuff from the decanter, supposing it to contain pure rum, and not knowing that her father had replaced the adulteration. He (Mr. Bolton) quite admitted that an explanation like that ought to be received by the Bench with a great amount of caution, but considering the fact the defendant had been a licensed victualler for ten years in that hotel, and before that in Wigan, and that he had a blameless record, he thought the Bench would be slow to reject the explanation he had given as a trumped up story. He contended that the very extent of the adulteration—44 degrees under proof—was strong corroboration of the story he had given, for no landlord, if he wished to adulterate, would have the madness to reduce his spirits to such an extent.—Evidence was given by the defendant, his wife, and daughter, and the case was ultimately dismissed.

WHISKY.

At Wigan, on July 24th, Thomas Hibbert, Clayton-street, landlord of the Buck-i'-th'-Vine Inn, was charged with selling whisky which was adulterated with water. The Town Clerk (Mr. A. Smith) stated that the defendant was charged with selling to Inspector Summer, a pint of whisky which the analysis showed was 31 degrees under proof, which was 6 degrees below the standard. He had ascertained that the defendant was a new tenant of the place and had not been in the business before, and that the bung had been left out of the keg, which would be detrimental to the quality of the whisky. There had been a technical offence committed, which Mr. Lee, who appeared for the defendant, had admitted to him, and they had come to the conclusion that the justice of the case would be met by the infliction of costs. The defendant was accordingly ordered to pay the costs.

At the Passage Petty Sessions, Cork, on August 1st, before Messrs. J. P. Stammers, J. Flynn, and Eyre Powell, Sergeant Patrick Mostyn, the Inspector for the district under the Food and Drugs Act, summoned William O'Leary, publican, Passage, West, for an alleged adulteration of whisky. The prosecution was an unusual one, and the following was the wording of the summons:—"That on the 21st June, 1893, being a person duly licensed for the sale of intoxicating liquors by retail to be consumed on the premises, did unlawfully sell to the said complainant to his prejudice as purchaser thereof an article of food (to wit) one pint and one glass of whisky, and which was not of the nature and substance and quality of the article demanded by the said complainant as such purchaser, contrary to the statute in such cases made and provided." Inspector Mostyn deposed that he asked the defendant for a pint and a glass of whisky, for which he paid 2s. 6d.; he then informed the parties that he intended to get the whisky analysed, and divided it into three portions in the customary way, giving one to the publican, keeping one himself, and sending the third to the Analyst. He had the certificate there which would show that the whisky was considerably under proof. The statute did not allow the whisky to be reduced more than 25 degrees, but this article was reduced 40 degrees. Mr. Stammers: Does the Analyst say what it was adulterated with? Mr. A. Julian, solicitor, who appeared for the defendant, said it was adulterated the way he (Mr. Stammers) would adulterate it if it was adulterated at all. (To the Sergeant): You have no objection to whisky diluted? Not if I wanted to drink it. You know perfectly well that proof whisky would not be wholesome to drink? Yes. And you as a peace officer would not recommend it for sale? No. Did you not know when you entered the shop that you would get whisky diluted with water? I suspected it. Now as an experienced officer, do you tell the Magistrates that you

did not know well that whisky sold by retailers is adulterated with water? I imagined it; I did not expect I was getting whisky diluted with water? I knew there might be some water in it, but not to the extent that I afterwards found. As a matter of fact, are you not certain that the whisky you buy from retailers is notoriously diluted under proof? Certainly; but not to this extent. Mr. Julian read the Analyst's certificate, which stated that it was free from methylated spirit, and did not contain anything foreign to whisky. District-Inspector Beirne: Did you buy this as whisky? Witness: Yes. District Inspector Beirne said the Act of Parliament allowed 25 per cent. of water to be added, but this contained much more. Mr. Julian said he thought the Magistrates would be satisfied that there had been no offence committed in that case, for everyone knew that there was no such thing sold for the purpose of drinking as proof whisky. If it were proof it would not be sold at the price it was sold at. They would see that there was no more difficult thing than to prosecute successfully in a case like that, because the gist of such an offence would be selling to the prejudice of the purchaser, but when the purchaser knew what he was getting he was not prejudiced. The Magistrates imposed a fine of 5s. and costs. In a second case of a similar nature against James Kearney, publican, Monkstown, the analysis was written on the certificate produced in the last case. Mr. Julian objected to the production of the certificate now, as it had served its purpose in the previous case, and the Bench holding with him dismissed the case without prejudice.

THE DOLPHIN CASE.

D.C.C. Vaughan charged Francis Cutler, of the Dolphin Inn, Mount-street, Wrexham, on July 29th, with selling adulterated whisky. Mr. Wynn Evans defended, and Mr. Ashton Bradley represented the owner of the property. The case was partly heard at the last Court, and was adjourned for the attendance of Mr. Lowe, the County Analyst. Mr. Lowe said that he received ten samples of whisky on July 19th. The sample marked No. 8 was 47½ per cent. under proof instead of 25 per cent. Mr. Wynn Evans submitted that the case must fall to the ground, because they had no evidence at all that the bottle containing the whisky which Mr. Vaughan obtained from the defendant had a label on it with the figure 8. Ten bottles containing whisky were sent to Mr. Lowe for analysis, and Mr. Lowe was not able to identify the bottle which was labelled with a figure 8 as that containing the whisky bought from the defendant. Mr. Vaughan had not done so, neither had any other witness. D.C.C. Vaughan said he gave it in evidence at the last Court. The Magistrates' Clerk said that was so. Mr. Wynn Evans said he took particular note to see whether Mr. Vaughan said anything of the kind. If he had said that he put No. 8 upon the bottle, he (Mr. Evans) would have remembered it. The Magistrates' Clerk: Did you put No. 8 upon the bottle? D.C.C. Vaughan: I did. The Chairman said his impression was that such evidence was given. Mr. Wynn Evans, baten on this point, then made one of the most extraordinary defences that has been heard in a Court: He said the defendant was charged under Sec. 6 of the Food and Drugs Act with selling 'to the prejudice of the purchaser,' and the evidence was that the whisky was adulterated—he could scarcely apply that term—with water, pure sparkling Wrexham water. If there had been any article deleterious to health introduced into the whisky, of course it would have been a different matter, but he had never heard of anybody, unless he was a very old toper, drinking whisky without a considerable admixture of water. He submitted that the offence was really a very trifling one. Even admitting that the defendant had been rather heavy handed in the supply of water, he had only saved the purchaser the trouble of adding it himself. From the point of view of the Court, it would, he thought, be a good thing if more of the whisky drunk were watered down, for probably the Magistrates would be troubled with less cases than they were at present. (All of which was the sorriest rubbish, and quite outside the question, which was that the defendant was selling water at the price of whisky, to the plunder of his customers.) The only evidence they had as to Mr. Vaughan offering to divide the whisky into three parts was the evidence of the boy Webster, and on the other hand the defendant and his wife would state that no such offer was made. It must be remembered that Mr. Vaughan and the boy Webster were engaged the whole of the day in getting samples of whisky, and it was very easy indeed for one case to be confused with another. Another point he had to urge was that, under section 16 of the Act, the offer to divide the whisky must be made forthwith, and their case was that no such offer was made. The whisky was taken away out of the defendant's sight, and it was kept away five or ten minutes. It was all very well to say that Mr. Vaughan was not the man to put water into the whisky, and they did not want to suggest it. They said that the prosecution had no right to allow such a suspicion to fall upon the matter. It was for the prosecution to make out their case, and the defendant said it was not necessary to show that water had been added to the whisky. The Act said that the whisky was to be sealed up forthwith, and that had not been done. He contended that the mere fact that water might have been added to the whisky was sufficient to enable the Magistrates to say that they did not think the case, although properly brought, made out, and they could not convict. The defendant said he had been landlord of the Dolphin Inn for about ten months. On the night of the 17th ult., and about five minutes past ten, a lad came into the house and asked for a pint of whisky. He served him and received 2s. On the previous day, he had put a quart of whisky into the bottle and had added about half a pint of water—what he thought was just about a quarter. He had never heard of a hydrometer. The boy took the bottle outside, and was away about ten minutes, when he came in with Supt.

Vaughan, who informed the defendant that the whisky had been purchased for analysis. He had some conversation with Mr. Vaughan, and then sent for his wife. Mr. Vaughan then stated that he would seal the whisky in his (defendant's) presence with the county seal. He also said that he would not put his (the defendant's) name on the bottle, but merely a number. He then sealed the bottle. He said nothing at all about dividing the whisky. If he had, defendant should certainly have declined, because the whisky had been out of his sight. Mr. D.C.C. Vaughan: He (defendant) was very excited that night. He said "You intend to ruin me." Jane Outler, wife of the defendant, corroborated defendant's evidence as to Webster being away ten minutes, and as to Mr. Vaughan not offering to divide the whisky. Harriet Davies said she went into the Dolphin on the night of the 17th ult., and met the witness, Webster, coming out as she was going in. She asked the time when she got inside, and was told it was five minutes past ten. It was very nearly ten minutes before Mr. Vaughan and Webster came into the house, for it was twenty minutes past ten when witness left the house, and Mr. Vaughan had only then been in the parlour with the defendant for a few minutes. Mr. Vaughan quoted cases with reference to the word "forthwith," and Mr. Evans pointed out that at the utmost the law had only allowed the article to be out of the sight of the purchaser for two minutes. Mr. T. C. Jones, Mr. Simon Jones, and Mr. J. F. Edhbury, who had heard the case at the previous Court, then retired, and on their return, Mr. T. C. Jones said that they were unanimous that the case was proved. The defendant would be fined £1 and the costs, 18s. 6d. On the application of Mr. Vaughan, a guinea was allowed for the Analyst, Mr. Lowe.—At the same Court, Herbert Felton, landlord of the Hat Inn, Charles-street, was also charged by D.C.C. Vaughan with selling adulterated whisky. Mr. Wynn Evans defended. Thomas Webster, an errand boy, said on June 17th, he was engaged by D.C.C. Vaughan to purchase whisky for analysis. He was sent to the Hat Inn, and was supplied with money and a bottle by Mr. Vaughan. He was supplied with a pint of whisky by the landlady. He put the bottle containing the whisky in his pocket and went out. He met Mr. Vaughan at the bottom of the steps, and they went into the house together. They saw the landlady, and Mr. Vaughan told her that the whisky had been bought for analysis, and asked whether she desired to have it divided. Mrs. Felton said she did not desire to have it divided, and wanted to exchange it. She said she had been in a hurry, and had got it out of the wrong bottle. Mr. Vaughan said he dare not exchange it. The bottle was afterwards sealed in the landlady's presence. D.C.C. Vaughan said that on the night of June 17th, he sent the boy Webster into the Hat Inn for a pint of whisky. He met him as he came out, and he accompanied him inside. Webster pointed out Mrs. Felton as the person who had supplied him, and witness then informed her that the whisky had been purchased for the purpose of analysis. Upon that she said, "I have given it out of the wrong bottle. It is Saturday night, and I make weak drink for drunken people." She begged very hard to be allowed to change the sample. Witness offered to divide it, but she did not want it. The sample was numbered nine. By Mr. Evans: Mrs. Felton did not want to change the whisky because it had been out of her sight. Mr. Lowe said, on June 19th he received ten samples of whisky, and five of them were adulterated. No 9 was 40 degrees under proof instead of 25 degrees. Mr. Wynn Evans said that the same defence was to have been raised in that case as in the previous case. His instructions were that the whisky was taken out of the sight of the vendor and kept out of sight from eight to ten minutes, but after the decision of the Magistrates in the last case he did not propose to trouble them with it. His other point was, that no offer to divide the whisky was made. Mr. Vaughan said such an offer was made, and therefore he left it there. He pointed out that the adulteration of water was lighter than in the previous case, and the adulteration was such as might be done without any idea of defrauding the buyer on the part of the vendor. The house belonged to Mr. Bates, and Mr. Thomas Manley, on his behalf, was in the house on June 16. He then tested the whisky and found it all right. He visited the house again on the following Monday, and again found the whisky all right. He believed it was a fact that in hot weather evaporation of spirits was more rapid than at other times. Mrs. Felton, wife of defendant, said the boy Webster, after purchasing the whisky, was outside eight or ten minutes before he came in with Mr. Vaughan. Mr. Vaughan did not offer to divide the whisky. Mr. Manley had tested the whisky on the day before, and on the following Monday, and said it was perfectly right. Polly Jones, servant, employed at the Hat Inn, said that the boy was outside eight or ten minutes. Mr. Thomas Manley said he tested the whisky at the Hat Inn, on June 16th. He found it rather stronger than it was necessary for it to be. On the following Monday he again tested, and found it in the same condition. At the suggestion of the Magistrates Mr. Manley went for his hydrometer, and tested the whisky produced in Court by Mr. Vaughan. Mr. Manley stated that he found it forty-one degrees under proof. Mr. Lowe had reported it forty degrees under proof. The defendant was fined £1 and 14s. 6d. costs. One guinea was allowed for the Analyst and one shilling for Webster.—Robert Jones, landlord of the Crown Inn, was also charged with selling adulterated whisky. Thomas Webster said that he was supplied with a pint of whisky at the Crown Inn, Abbot-street. He afterwards went into the house with Mr. Vaughan, and they saw the landlady. On being asked he said he did not wish to have the whisky divided. D.C.C. Vaughan also gave evidence, and P.C. D.C. Davies proved the delivery of the sample to Mr. Lowe. Mr. Vaughan said he did not propose calling the Analyst. His certificate showed that the whisky was 80½ degrees under proof instead of 25 degrees. It was also coloured with caramel—burnt sugar. The defendant, who was unwell, and was represented by his wife, was fined 7s. 6d. and 11s. 6d. costs, one shilling being allowed for Webster.

MILK.

At Richmond Police Court, on August 4th, George Glover, dairyman, Richmond, was summoned for selling milk, from which 85 per cent. of the butter fat had been abstracted, without making disclosure of the alteration. The manager to Mr. Glover, said that the principal was away in Scotland and he had not received the summons. Police-constable Abrahams proved service on the 26th of July. A young lady took the summons stating that she was defendant's sister. The Mayor: Mr. Glover ought to have been here. We must go on with the case. Mr. Cook said that on the 18th of July he saw defendant's cart and man in Kew-foot-road. Witness's assistant asked for a pint of milk, with which he was served, and he told the young man that it would be analysed, and he would have to divide it. The assistant divided the milk into three parts. One portion was given to Mr. Glover's man, one was sent to the Public Analyst, and one witness retained. He put in a certificate from the Public Analyst, which stated that there was four per cent. of added water, 85 per cent. of fat abstracted, and traces of boracic acid (a preservative). Defendant's manager stated that the milk came from a farm, and he had a guaranty on every can. His defence was that the milk was sold exactly as received. The farmer had told him that the feeding was very bad. He asked for a week's adjournment, in order that the defence might be properly prepared. The Mayor thought from what he had said it was evident he had no legal defence, and could not prepare one in a week. It was the duty of Mr. Glover to see that the milk was in proper condition. In answer to the Mayor, Mr. Cook said that he thought defendant had had plenty of time to prepare a defence. The Magistrates retired to consider the case, and on their return a fine of 40s. and 6s. costs was inflicted, the Mayor stating that they had taken a lenient view of the case.

At Sheffield Police-court, on August 3rd, John Thomas Morton, Oughtibridge, was summoned for adulterating his milk with 25 per cent. of water; and John Aston, Wharfedale Side, and Frederick Reaney, Oxford-street, were each summoned for adulterating milk with 10 per cent. of water. Mr. Sayer said the Health Committee regretted to find that the Act of Parliament under which the charges were made was not complied with as they thought it would be from the long time it had been in force in Sheffield. They found the same people appearing at the Court time after time, and the samples taken were not at all encouraging. The Inspector went out on this Sunday morning in the neighbourhood of Allen-street, and took five samples promiscuously. Three of the persons were summoned, and the other samples were of suspiciously poor quality, but not bad enough to be condemned. Morton was fined 28s.; Aston, who was fined £2 and costs in January for a similar offence, and from whom a suspicious sample was taken in March, was fined 21s., including costs, and Reaney, who has only just entered the milk business, was ordered to pay 21s.

At Brentford Petty Sessions on August 5th, George White, of Windmill-road, Brentford, dairyman, was summoned for having sold milk which was not of the nature and substance demanded. Mr. T. A. Woodbridge appeared for the defendant. Edward Watkins, assistant to Mr. W. Tyler, Food and Drugs Act Inspector for the Middlesex County Council, said that on the 13th July, he went up to a man in the employ of the defendant as milk carrier, and asked for a pint of new milk, for which 2d. was paid. The sample was handed over to Mr. Tyler. Cross-examined: Defendant was not present. Witness had not seen the man before. Inspector W. Tyler said that he received from the last witness a jug containing new milk, and he told defendant's man that he might have it divided, to which the man assented. One portion was sent to the Official Analyst, who certified that the milk was adulterated with 30 per cent. of added water. Cross-examined: He had seen the taking of the sample, and the defendant stated that his man had watered the milk. At defendant's request he took a second sample from the man. Mr. Woodbridge admitted he had a difficult case to meet in view of the record against the defendant. There could be no justification for the adulteration to the extent of 30 per cent. if the defendant were responsible, but he believed that his man wilfully put water into the milk. The man never took the sample entrusted to him to his master; that was wrong, and further than that, the Inspector took a further sample of the milk carried by the man, and it was certified as adulterated. The defendant had done nothing for which he was personally responsible. The defendant, called as a witness, denied that the milk was adulterated with his knowledge or consent. Two previous convictions were reported against the defendant. The Bench expressed an opinion that the defendant was liable for the adulteration, and fined him £5.—William Osborne, of Netley-road, Brentford, was similarly summoned. The taking of the sample was proved by Edward Watkins, who said that he purchased a pint of new milk from a lad in the defendant's employ. Inspector Tyler deposed to dividing the sample into three parts, one of which was sent to the Public Analyst, who certified that it was adulterated with 10 per cent. of added water. The defendant said he was paying 20 per cent. above London prices for his milk, and he sent it out just as he received it from the Dairy Farm Company. He knew nothing of the adulteration. The Inspector said that since the defendant was last before the Bench he had taken five samples and found them pure. Four previous convictions were proved against the defendant. He was fined £2 and costs.

At Youghal Petty Sessions, Mary Bransfield and Patrick Kelleher were summoned by Sergeant Slattery, for selling milk adulterated with 12 per cent. of water. The defendants were examined, and proved that they bought the milk from farmers and sold it as they received it, and they swore that they put no water in it. A fine of 5s. and costs was imposed on each. The other cases were unimportant.

At Westminster Police-court, Farmer James Bull, of 15, Commercial-road, appeared to answer two adjourned summonses, issued at the instance of the St. George's Vestry, for selling milk from which the original fat had been abstracted. Mr. Hithens, solicitor, appeared for the prosecution. In the first instance Mr. Bull was summoned for selling to John Alston, on the 18th May, a pint of milk from which 16 per cent. of the fat had been abstracted, and in the second for selling another pint of milk, from which 10 per cent. had been abstracted, to Harry Herriott on the 15th May. The two cases were adjourned in order that an analysis of the milk supplied to Mr. Herriott might be obtained from Somerset House. Mr. Hithens now stated that the certificate confirmed the original analysis. The milk had had at least eight per cent. of the fat abstracted. Defendant: It was supplied just as the cow gave it. Mr. de Ruten said there could be no doubt that the milk had been adulterated. He should fine the defendant four guineas, and order him to pay three guineas costs.

Charles Phillips, of 125, Ossulston-street, Somers Town, was summoned at the Clerkenwell Police-court, by Inspector Shill, for selling a pint of milk which was adulterated with eight degrees of water, and from which 90 per cent. of its cream had been abstracted. Mr. Cowdrell, for the defence, said when the purchase was made the shop was shut. The milk was sold without authority by the son of a lodger in the house. Mr. Bros dismissed the summons.

At Liverpool, on August 2nd, Michael Ashcroft, milk dealer, 7, Highfield-street, was summoned for selling as new milk a liquid which on analysis was found to contain ten parts of water to every 100 of the poorest milk. A fine of 10s. and costs was imposed.—John Outhbert, milk dealer, 48, Great Crosshall-street, for selling milk which contained six parts of water to every 100, was fined 10s. and costs.

At the Petty Sessions, on July 29, Henry Mayo, of Grosvenor-road, Hanwell, was summoned for having sold milk which was adulterated with 20 per cent. of added water. The taking of the sample was proved by Edward Watkins, and Inspector Tyler produced the certificate of the Analyst which stated that the water was added to the extent of 20 per cent. He said he had never before taken a sample of the defendant's milk, and defendant told him that the milk in question was not had from his usual farmer. Fined 20s.

At Dublin, last week, Richard Fowler, of Poplar-row, Ballybough-road, was fined £3 on a charge of having exposed for sale buttermilk adulterated with 28 per cent. of water.—Mary O'Neill, of 16, Lower Gardiner-street, was fined £1 for exposing for sale new milk adulterated with 14 per cent. of water.—Mary Clitheroe, of 4, Lower Gloucester-street, was summoned for exposing for sale buttermilk adulterated with 80 per cent. of water. Inspector Kane deposed that when asked for buttermilk, defendant's daughter, who was in the shop, denied that she had any. He saw a churn in the shop which contained buttermilk. He asked for a halfpennyworth, which was refused. Mr. O'Donel said that this was not a *bona fide* sale, and therefore he was unable to convict. He considered it was a straining of evidence. Mr. Hanmore appeared for the defence, and said that the sample had been forced from the defendant. As a matter of fact it was not buttermilk, but thick new milk. Mr. MacSheehy, who appeared for the Corporation, said he would not press the case. Mr. O'Donel said he would dismiss the case.—John Leeson, dairy keeper, No. 8, Coombe, was fined £1 for having exposed for sale milk which was adulterated with 11 per cent. of water.

At Canterbury Police-court, on July 26th, Alfred Greenstreet, Canterbury, was summoned for selling adulterated milk. Mr. O. Richardson, Sanitary Inspector of the Urban Sanitary Authority, deposed that on the 24th June he met the defendant in Military-road and asked to be served with a pint of milk. Having received it, witness divided the sample and submitted one part to the City Analyst. He produced the certificate, which showed that the milk contained 11 per cent. of added water. Defendant denied adding any water to his milk. He did not keep his own cows, but purchased the milk from another milkman at Tyler-hill. Mr. Richardson stated that on several previous occasions he had taken samples of the defendant's milk, but never found it adulterated. The Chairman said, in consideration of the previous good character of the defendant, the Bench would deal leniently with him. He would be fined 10s. and costs, £1 4s., or in default, 14 days' imprisonment. The money was paid.

At the last meeting of the Wandsworth District Board of Works, Mr. Smith, Inspector under the Food and Drugs Act, reported that two samples of milk purchased in Wandsworth and Clapham had been proved to be adulterated with 8 and 12 per cent. respectively of added water. Proceedings were ordered to be taken against the offenders.

IMPORTANT TO RETAIL TRADERS.

If you want to know what Food Stuffs you can sell without risk of prosecution, read **FOOD AND SANITATION**. The largest circulation of any Food Journal.

The Grocer who does not subscribe to **FOOD AND SANITATION** places himself, at the mercy of unscrupulous wholesale dealers. **FOOD AND SANITATION** costs only 6s. 6d. yearly, post free, and has saved its readers from many prosecutions. Send on your 6s. 6d. at once, and begin with the New Volume.

Address, PUBLISHER, "**FOOD AND SANITATION**,"
183, Strand, London, W.C.

OFFENSIVE POULTRY.

At Liverpool Police-court, on August 2nd, a summons was heard against Mary Lord, occupier of a stall in St. John's Market, for exposing for sale poultry which was unfit for human food. Inspector Roberts stated that he found two ducks and a fowl dead in a hamper behind the counter. They had been plucked and dressed with flour, although they had died a natural death, and were in an offensive condition. Defendant pleaded that the birds were not intended for sale, and she had, in fact, given them away to an old lady. The old lady in question was here called to give evidence, but failed to answer. Mr. Kinghorn asked defendant whether she was sure that her old lady was alive or not. Defendant evinced some little alarm at this question, and said she was—if she had not died since Tuesday (laughter). A fine of 10s. and costs was imposed.

MIDDLESEX COUNTY COUNCIL.

A return of the number of samples submitted to the County Analyst by the Inspectors during the quarter ended June 30th showed that 370 samples were submitted, and that 56 were found to be adulterated, and 40 to be of inferior quality.

EAST SUSSEX CITY COUNCIL.

The report by Mr. E. H. Moore, the Public Analyst, for the quarter ending 25th June last, shewed that ten samples of butter from the Mayfield district had been analysed and all found genuine; that four samples of milk, one of brandy and five of butter, from the East Grinstead district had been all found genuine with the exception of one sample of milk, which was deficient in butter fat; that two samples of coffee, two of whisky, two of tea, two of milk, one of chocolate, and one of black pepper from the Lewes district had all been found genuine; that of ten samples of butter from the Battle district which had been analysed, nine were genuine and one rancid; and that of ten samples of milk from the Hove district, seven were found to be genuine and three adulterated, being deficient in butter fat. The Analyst pointed out that the wholesale prices of all butter—Irish, Continental, Home and Colonial (the latter a new addition to our food supply)—have during the quarter been very low, being quoted from 73s. to 80s. per cwt. This leaves a good margin to vendors at low prices, and the demand of the public for 1s. butter has been easily met. But as the year advances and late autumn prices stiffen, the perennial 1s. butter becomes a difficulty often impossible to supply except by loss or adulteration. The influence on our winter supply by a still larger importation of bounty fed Colonial butter will be watched with interest. The use of sweet separated milk as an adulterant has become normal, particularly among the poorer classes' supply.

FOOD AND DRUGS INSPECTORS' QUERIES.

Is it a legal procedure for an Inspector of Food and Drugs to send his assistant or servant to purchase a sample and let the assistant or servant divide the said sample, make the usual notification, leave one portion of the sample with vendor, then deliver the other two portions to the Inspector? I am told this is done in some places, the Inspector never appearing in the matter personally. J. W.

CORRESPONDENCE.

MR. MAYBRICK'S DEATH.

To the EDITOR of FOOD AND SANITATION.

SIR—In the evidence of Nurse Callery, on the Magisterial Inquiry (but not repeated on the trial) I find the following passage:—"Mrs. Maybrick frequently asked if it was time for Mr. Maybrick to have any nourishment. He was very much exhausted." This was on the day before his death. He would evidently have got more nourishment if Mrs. Maybrick had been allowed to give it. OBSERVER.

SPECIAL NOTICE TO SUBSCRIBERS.

Subscribers are requested to note that the last issue completed the Second Volume, and that Yearly Subscriptions are now due, and should be forwarded forthwith on the appended form. Back numbers of the Journal are now very scarce, and can only be supplied in future at 3d. per copy. A few complete copies of Vol. I., containing the first 26 numbers may still be had bound in cloth and gold lettered at 7s. 6d. per volume. An index to Vols. I. and II. is in preparation and will be ready in a fortnight's time, price 1s. Subscribers requiring index will oblige by communicating with the Publisher. The Index will be complete, giving cross-references to articles, appeals and all convictions, and our readers will readily understand that the charge of 1s. each, by no means defrays the cost of compiling and printing such a large Index as that of Vols. I. and II. of **FOOD AND SANITATION**.

Subscribers and readers requiring the Index are requested to send their names, and the price 1s., to the publisher, before the 15th inst., as a limited number only will be printed.

"**FOOD AND SANITATION**" has over 20,000 Readers: Medical Practitioners, Sanitary Inspectors, Food and Drugs Acts Inspectors, Wholesale and Retail Grocers, Weights and Measures Inspectors, Town Clerks, Solicitors concerned with the Food and Drugs and Public Health Acts, Surveyors, Medical Officers of Health, and the General Public.

Chafed Skin, Piles, Scalds, Chilblains,
Chapped Hands, Neuralgic and Rheumatic Pains,
Sore Eyes, Ear-ache, Cuts, Sunburn, Insect Bites
or Stings, Throat Colds, and Skin Ailments

QUICKLY RELIEVED BY USE OF

CALVERT'S CARBOLIC OINTMENT,

Large Pots, 13½d. each, with full Instructions.

Court Circular says: "We cannot too highly recommend Calvert's Ointment. It is the best general Ointment with which we are familiar, and ought to be a stock remedy in every household."

Private report from Limassol Cyprus: "I have never found anything to come up to it for neuralgic 'Rheumatic Pains.'"

Samples sent Free by Post on receipt of value.

F. C. CALVERT & CO., MANCHESTER.

Awarded 60 Gold and Silver Medals and Diplomas.

IMPORTANT TO RETAIL TRADERS.

If you want to know what Food Stuffs you can sell without risk of prosecution, read **FOOD AND SANITATION**. The largest circulation of any Food Journal.

The Grocer who does not subscribe to **FOOD AND SANITATION** places himself, at the mercy of unscrupulous wholesale dealers. **FOOD AND SANITATION** costs only 6s. 6d. yearly, post free, and has saved its readers from many prosecutions. Send on your 6s. 6d. at once, and begin with the New Volume.

Address, PUBLISHER, "**FOOD AND SANITATION**,"
183, Strand, London, W.C.

THE FOOD SUPPLY OF ROCHDALE.

Rochdale, with 72,000 inhabitants, affords an excellent example of enlightened advancement. According to the last Local Government Board report it took 146 samples during a year. The last quarterly report of the Borough Analyst, Mr. Stenhouse, states that out of 43 samples of milk analysed, a prosecution was instituted in one case only. Three samples were of inferior quality. The 39 other samples of new milk were of good quality. Of nine samples of butter analysed Mr. Stenhouse says that some of them had evidently been made in such a way as to incorporate with them a considerable quantity of water. He adds:—"There is, however, no legal limit fixed as regards water in butter, and I have not seen or heard of a prosecution for less than 18 per cent." More is the pity! If there were a limit the water in butter rogue would not be able to charge 1s. per pound for water made to stand upright. Wretched fraud fostering towns like Blackpool, might with advantage follow the good example of Rochdale.

A WATER WITH PLENTY OF BODY IN IT.

On the 9th inst., Dr. Kauffman, an Inspector from the Home Office, held an inquiry at Penrynnydd into the condition of the churchyard, and the alleged pollution of the stream running past it, it being alleged that bodies were covered with only eighteen inches of soil, and that persons were using water from the stream for domestic purposes. The inquiry was held in the churchyard, and there were present the Rev. R. Watmough, vicar of the church; the Rev. J. Johnson, Primitive Methodist minister, &c. Mr. Paul Jones, the sexton, said he allowed six feet for two bodies. There was plenty of room for new graves in the churchyard. He could not say if some coffins were only eighteen or nineteen inches from the surface. The Inspector said he would write to the Medical Officer of the district, (Dr. Edwards, Hawarden), and the upshot of it would be very likely that the stream would be declared polluted.

UNSOUND FOOD.

At Belfast, on the 8th August, in the Summons Court, before John Gregg, Thomas H. Browne, and Edward W. Pim, Esquires, J.P.'s, Alice O'Hanlon, 104, Bridge-end, was summoned and fined 20s. and costs, for that she on the 29th day of July, 1898, did expose for sale, a quantity of unsound and unwholesome "fruit"; which said fruit was condemned by the Justices then sitting in Petty Sessions in and for said City.—Margaret Ann Hall, 70, Verner-street, was fined 10s. and costs, for exposing for sale diseased herrings.—Daniel Rogers, 53, Old Lodge-road, was fined 20s. and costs, for exposing for sale diseased liver and unsound fruit.

Food and Sanitation.

SATURDAY, AUGUST 19, 1898.

NOTICE.

All communications for the Editor to be addressed to the Editor, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

BACON TRADE FRAUDS.

We have been alone amongst newspapers in pointing out the colossal frauds perpetrated upon the public in the matter of foods, and in demanding that the idle nuisances that infest our Government Offices and pocket enormous salaries from the public for doing no atom of any useful work under the canopy of heaven should be compelled to do their duty in suppressing such frauds, and give fair play, amongst others, to English and Irish bacon growers and curers. The world cannot produce bacon to equal in quality that of England and Ireland, but of what avail is that when we are confronted with what is really encouragement of thievery on the part of our Government departments, the practice of it in its meanest form by Hon., Right Hon. and Noble Gentlemen of both Houses of Parliament, and that maddening ignorance and laziness, without a double dose of which no person can apparently hold office, in a Government department, that have made it well-nigh impossible for an Englishman to purchase English bacon in England. One honourable Member of Parliament whom we know, and whose smug-faced hypocrisy and denunciations of oppression and wrong have gained him a seat in Parliament as an exponent of Ireland's wrongs, cuts his country's throat instead of his own by importing American bacon, smoking and branding it as prime Irish, and, in this rascally manner, ruining the country for which he professes the most violent attachment. During a month past we have made purchases of bacon from shops in the vicinity of the Strand, and in not one instance have we been able to procure English or Irish bacon although the lardy, innutritious, uneatable trash has been sold us as prime Wiltshire and best Irish. But there is scant cause for wonder at our failures, or the general inability of the public to procure genuine bacon when we look at what our lazy ignorant Government Departments are doing to encourage the ruin of the English and Irish bacon industries. To take as an example—the Merchandise Marks Acts. At an enormous expense of public time and money these were passed to give native manufacturers fair play. One of the costliest Governmental impostures in the world—the Board of Trade—swallows oceans of public money, and is concerned with the enforcement of these Acts. It is interesting to consider how this disgraceful Board has done its work. Although the country bristles with frauds and offenders against the Merchandise Marks Acts, there were last year but six prosecutions—a miserable total of only six attempts to suppress robbery of the public, being the entire result of this enormous expenditure of public time and money. But for even these prosecutions not one atom of credit is due to the idle, useless department, for they were only entered upon after trade associations had brought the cases cut and dried and prodded the department to stir itself. Three of the cases were against Mr. T. J. Lipton, owner of scores of shops, on charges of applying false trade descriptions to hams sold at his Belfast shop. Mr. T. J. Lipton was convicted of selling American hams branded "Finest quality smoked ham, our own cure at Lipton's market," "Lipton's prime cure," and "Tracey's Mild Cure." These descriptions being such as would lead the purchasers to believe that the inferior foreign produce was Irish produce. The term "finest quality smoked ham" in itself is a lie when applied to American ham. American swine fed on Indian corn are less robust in health, and their flesh is less nutritious or wholesome than is the flesh of Irish or English swine; and the American produce vended by Mr. Lipton, and bought in enormous quantities by the public under the belief that it is English or Irish ham and bacon is not the finest quality ham or bacon; it is lardy, innutritious, inferior American meat. How much inferior it is to real English or Irish bacon, we will let *The National Provisioner*, the leading organ of the Provision and Meat Industries of the United States testify. Writing on July 29th, on "Irish v. American Bacon," *The National Provisioner* says:—

"The difference between Irish and American bacon and the superiority of the former is not a matter of 'cure' and 'cut,' but of 'breed' and 'feed.' The ruling breed in Ireland is the Yorkshire White—a very uncouth looking animal with long, flat, deep sides, shoulders and hams and coarse long necks,

heads and legs. When dressed, with their heads and legs off, they look much better, and one decided advantage which they have over the American is that they cut 'lean' and throughout the fat and lean is much more evenly divided. Most of their food is cooked and contains very little oily matter, being generally bran, turnips, mangel-wurzel, buttermilk, etc., and instead of being raised in the parlor or under the bed, as is generally supposed, the bulk of them are brought up in comfortable, well bedded pens, usually with brick or tile floors. (Here we would like to remark in defence of the pig that no animal more delights in a nice, fresh bed of straw or tries harder to keep from littering it.) On account of his peculiar shape, slow fattening and cooked oilless food, both the flavor and admixture of fat and lean make the Irish 'pig' more palatable than the American 'hog,' fed almost entirely on raw corn and rushed to the killing maturity, a perfect mass of fat, or else grass fed, skinny, yellow and oily.

"The Irish bacon when smoked remains dry and firm, while the American bacon shows oil from the start, is softer, becomes discolored (in the fat) in spots and finally rancid.

"The packer has brought the American hog to the highest state of the art in cutting and curing, but we doubt very much if the American farmer will ever strive for any higher aim than getting on the greatest quantity of fat in the shortest space of time."

In the face of facts like these, what do we find to be the result of the Lipton prosecutions? The Lord Lieutenant of Ireland draws £20,000 per year for perpetrating some tom-foolery, and, amongst other jackasseries, he actually quashed the conviction in one case of Mr. T. J. Lipton, whilst their Lordships of the Queen's Bench obligingly assisted Mr. Lipton on a legal quibble and quashed the other two. A few weeks ago we commented upon the food impostures practiced in Southport and Blackpool. We were accused of making false charges, and abused by the reptile press in Blackpool and district. Amongst others, a Mr. Daniel Melia was loud in his condemnation of our plain-speaking. The following parallel contrast of Mr. Melia's unctuous profession with his practices is instructive:—

DANIEL TO THE *Blackpool Herald*.

"My attention has been drawn to an article in last Tuesday's issue of the *Manchester Evening News*, which had escaped my notice at the time, dealing with charges made by a journal, styled *Food and Sanitation*, against the tradesmen of Blackpool. It is a scurrilous thing to say that at this popular summer resort margarine is sold as butter, and it is absolutely devoid of truth, so far as the respectable tradesmen of the town are concerned; and when it is further stated that filthy margarine is palmed off upon buyers as fresh and pure butter, I protest most strongly against such an assertion, as being both false and stupid. I am only sorry to say that it is too true that in many places all over the country margarine is sold by unscrupulous tradesmen as butter, but speaking for ourselves as extensive importers and dealers in pure butter, and having a branch at Blackpool, in addition to nearly sixty others, we take care to have every tub of butter guaranteed pure, and we are always pleased to give a similar guarantee to customers, if desired. It is a most scandalous thing that writers and journals should be allowed to make and publish such dastardly and cowardly attacks upon tradesmen whose bona fides are unquestionable. Such conduct is calculated to do a serious amount of injury to the town itself, if allowed to pass without comment. Travelling recently as I have done, for the benefit of my health, about southern watering places, I have no hesitation in stating that prices are on an average from 10 to 15 per cent. higher than those charged by Blackpool tradesmen for the very same class of goods. Thanking you in anticipation for the insertion of this letter, faithfully yours,
"DANIEL MELIA."

DANIEL COMES TO JUDGMENT. THE *Manchester Evening Mail*, August 11th, says:—

"A case of equal importance to the public and to those engaged in the grocery trade came before Mr. Headlam, at the City Police-court, this morning. Daniel Melia, of the firm of Daniel Melia and Co., who have a large number of grocers' shops in Manchester and other towns, was summoned for an offence under the Merchandise Marks Act, and Thomas Parry, an employee of his, was also a defendant. It was a Board of Trade prosecution, and was conducted by Mr. Byrne, who had been instructed by the solicitor to the Board. Mr. Sutton appeared for both defendants. Mr. Byrne, in opening the case, said Mr. Melia was summoned under the Act for unlawfully having in his possession for sale certain goods, namely, bacon, to which a false trade description was applied. Mr. Parry was charged with exposing such goods for sale. Amongst the articles which Mr. Melia sold was bacon, and upon the 20th of April last one of the witnesses went to Mr. Melia's shop at 357, Oxford-road, in this city. He there found a quantity of bacon which was Continental bacon, and on that bacon was placed the label, "Real Wiltshire." The witness purchased a quantity of the bacon. He was not going to say that it was not bacon of a good class, but it was not Wiltshire at all. He proceeded to argue that the label "Real Wiltshire" was a false trade description. Mr. William Nash, of 86, Ducie-street, said on the 20th April he, at the request of Mr. J. Lees, grocer, 219, Oxford-street, made a purchase of bacon from Mr. Melia's shop in Oxford-street. He asked for Wiltshire bacon, and was served from a piece labelled "Real Wiltshire," for which he gave 9d. a pound. It was invoiced to him as "smoked Wiltshire bacon." The bacon was not Wiltshire bacon. Cross-examined: There

was the brand "A.S." on the bacon he bought. That was the brand of a Manchester house which dealt in foreign bacon. He knew by the "A.S." brand that it was foreign bacon. There was a bacon in the trade which was known as "Wiltshire cut," which was not Wiltshire. Mr. Edward Godfrey Woodhead, Victoria-street, corroborated Mr. Nash's evidence. Mr. John Lees, 219, Oxford-street, grocer and provision dealer, said on the 13th April he looked at the defendant's shop window, and saw bacon branded "A.S." offered for sale as Wiltshire. Bacon marked "A.S." was Danish bacon. To describe Mr. Nash's purchase as "Real Wiltshire" was absolutely false. Cross-examined: Real Wiltshire could not be sold under 11d. per pound. There was a bacon sold in the trade as "Wiltshire cut" which was foreign bacon. That was a trick of the trade, and unfortunately the public did not know it. He did not know Mr. Melia, but he knew this (tapping the bacon which Mr. Nash had bought). Mr. Sutton: What do you mean by that. Witness: That to call this piece of bacon Wiltshire is fraudulent.

As it is with bacon so it is with all classes of foods. In fully two-thirds of the kingdom impostures of this class are practiced on the public, English and Irish trade ruined, and the consumers have foreign goods foisted upon them.

We are not concerned with these wretched typical instances of the Melia's or Lipton's. It is not the individual we attack but the system and practice—a system and practice for the prevalence of which the Board of Trade is responsible. So long as the Board of Trade is idle so long will such practices flourish.

It is the shameless crushing out of English and Irish industries by free fraud fostered by Government departments that arouses our indignation. The recent report of the Select Committee on meat marking has one significant corroboration of our strictures regarding another town—Southport—where the Food and Drugs Acts, the Merchandise Marks Acts, and the Margarine Acts have been "burked" for years. In the town of Southport, says the report of Lord Onslow's Committee, "with a population of 41,500, and where 54 butchers, who would sell on an average at least one carcass a-piece a week, carry on business, it was stated that but three English animals were killed during the week." We could supplement that by stating that in the town of Southport, as in scores of other towns throughout England to our own knowledge, adulterated American lard, German acetic acid vinegar, Hamburg and other margarine, American bacon and ham are all sold as genuine articles, and that amongst those who practically stultify the Acts that would suppress such frauds are prominent most noble members of this Meat Marking Committee itself. English agriculture and manufacturers of native products do not want an ocean of gabble and reams of printed evidence. What they need most is less cackle from this or that most noble goose and more real work. The Right Hon. J. Mundella receives £2,000 yearly from this country as President of the Board of Trade. In our opinion it is time this gentleman should be very plainly told that those who draw public money should do some public service for it. Judged by his present services we would consider this exceptionally able gentleman—for so his toadies regularly inform us he is—dear at a silver sixpence per week. England, Ireland, and Scotland have had a long spell of political and bureaucratic asininity. It is time our so-called statesmen and officials were Englishmen doing some real work for England. Denmark in ten years increases its butter exports to us by sixty million pounds. Our own dairy farming, pig-curing, and countless other industries, are withdrawing away under the twin curses of Government scientific ignoramus, who pass margarine as genuine butter, and idle, useless officials who draw England's money and do not one atom of useful work for it. The best of Acts of Parliament are useless unless actively enforced, and the minister who is too lazy, ignorant, or careless, to put them into operation, is the worst of public nuisances.

MEAT MARKING.

Mr. Walter Tyler, Inspector under the Food and Drugs Act for Middlesex, gave evidence before the Select Committee of the House of Lords who are inquiring as to the desirability of marking imported foreign produce. Mr. Tyler was strongly in favour of imported foreign meat being distinguished by labels.

MR. JOHN HUTTON AND ADULTERATION.

Mr. John Hutton has done a fair amount of useful public work, but he is not the colossal genius his log-rolling friends strive with much energy to make him out to be, and it is perhaps as well that the humbug of the London County Council's cool assumption of every virtue and of the *kudos* of protecting the public from this and that should be given a little consideration. We do not know if Mr. John Hutton is responsible for the following which appeared in the *Daily Telegraph* of August 15th, or if the *Daily Telegraph*, with that carefully cultured capacity for turning everything into drivel which has gained it repute as a newspaper, has twisted Mr. Hutton's remarks into a meaning other than he intended they should convey, but anyhow Mr. John Hutton, as Chairman of the London County Council, writes from Spring-gardens:—

"In your kindly notice of my speech at the meeting of the Incorporated Society of Inspectors of Weights and Measures, you omit to mention that last year alone no less than 750 dishonest coal merchants and hawkers were dealt with by our officers, and that 1,273 shopkeepers were prosecuted in the police-courts of the metropolis alone for offences against the Adulteration Acts. I think all will admit that as far as human effort can protect the community everything possible is being done. I can safely say our men are very skilful and eager to enforce the law. The public will materially assist by forwarding their complaints direct to me, and I will see they receive instant attention."

The casual reader would gather from the above that the London County Council's officers prosecuted 1,273 shopkeepers in London for adulteration. For pure unadulterated cheek it would be hard to match this statement credited to Mr. Hutton. It is absolutely untrue, and devoid of a shred of foundation. The London County Council and its officers have done nothing at any time to discover, to check or to prosecute for adulteration, yet Mr. Hutton coolly arrogates to it the credit of the whole of the meritorious work of the London Vestries and their officials. St. George's, Hanover-square, Islington, the Strand, Lambeth, and other Vestries, against whom frothy County Councilors never tire of levelling insults, and against which London Reform Union notoriety-hunting-public-subscription-sponging-humbugs spout themselves hoarse, did all this to suppress adulteration. The Vestries officers took the samples and the Vestries instituted and bore the cost of the prosecutions, but Mr. Hutton and his County Council would strut about in plumes filched from the Vestries. But perhaps Mr. Hutton did not mean to filch for the London County Council the credit of these 1,273 attempts to protect the public from robbery in food stuffs? It may be a bit of loose writing. If so, it would be perhaps as well if Mr. John Hutton promptly said so, and gave credit to those to whom it is due, which, so far as pure food is concerned and many frauds worse even than those of adulterated estates, cannot certainly be given to the London County Council. We have at present under examination some of the very meanest of mean adulteration frauds that have been, and are being practised on a colossal scale by some of its most professedly sanctimonious members, and they are not alone on the council in making adulteration a fine art. The London County Council and the London Reform Union will be wise to say little about what they have done or are doing to suppress adulteration, having as most important members of their much professing committees gentry who did they live in France would ere now be adorning the inside of a jail for adulteration frauds.

The *City Press* also gives the London County Council the credit of this work as follows:—The subject of weights and measures which Mr. Hutton discoursed upon before the Incorporated Society of Inspectors of Weights and Measures on Friday (*vide Saturday's City Press*), is one that is of great interest to every household, and especially to every housewife. The number of weights and measures and weighing machines rejected by the officers of the London County Council last year amounted, it appears, to more than 25,000. Notwithstanding the Act of 1889, no less than 750 dishonest coal merchants and hawkers were dealt with by the Council's officers, and 1,273 shopkeepers were prosecuted in the police courts of the Metropolis alone for offences against the Adulteration Acts. Adulteration is, of course as profitable as short weight to the swindling trader, and it is satisfactory to know that so strong an effort is being made to check these cruel frauds.

We appreciate as much as anyone the good work the London County Council has done in many directions, but having seen that some twenty important newspapers have credited the London County Council with all this good work, we think it necessary that those who really did it should have the praise.

ALUM IN BREAD.

At the Wolverhampton Police-court, on August 4th, Ann Jones, High-street, Gornal, was ordered to pay 20s. and the costs, for selling bread adulterated with alum to the extent of 57 grains per 4lb. loaf.

COVENTRY COUNTY COUNCIL.

At the last meeting Dr. A. Bostock Hill reported that in the quarter ending June 30th, nine samples of milk were submitted to him by Inspector Clarke, for analysis. Of these, two were deficient of their natural fat, another had been adulterated to the extent of 12 per cent. with added water. The remaining samples were genuine, although one was of rather poor quality. It was satisfactory to note that in the case of the adulterated samples penalties were inflicted upon the vendors.

MARYLEBONE.

Dr. A. Wynter Blyth, Public Analyst for Marylebone, analysed 511 samples representing all classes of food, as well as alcoholic and non-alcoholic beverages and drugs. Of the different articles, 27 were found to be adulterated. These, with the exception of two samples of coffee, one of mustard, one of tinned pineapples, and one of desiccated soup, consisted of milk and butter. Fifteen samples of milk were adulterated. In one case the milk was diluted, skimmed, and then brought up to its usual consistency by the addition of starch. The vendor, having been previously convicted, was fined £20. There were six other convictions for adulteration of milk, the total penalties recovered being £26 9s. 6d. Seven samples of butter were discovered to be adulterated, and five of the vendors were convicted, but the fines inflicted by the magistrate were very small, the aggregate penalties being only 22s. 6d., or under 5s. apiece. In one case, which was a second conviction of the same offence, the fine imposed was only 10s.

CHESHIRE COUNTY COUNCIL.

Mr. J. Carter Bell, County Analyst, in his report for the year ended 30th June, stated that he had analysed 178 samples, consisting of 49 milks, 20 butters, 16 cheeses, 9 lards, 12 groceries, 31 spirits, and 41 waters. Of these five were adulterated, namely, 4 milks and 1 whisky. The milks were adulterated with 10 and 20 per cent. of water respectively, and two were robbed of their cream to the extent of 20 and 60 per cent. There were 10 cases of very poor milk, which could not have come from a dairy of well-fed cows. Many of the cheeses were deficient in fat, some containing as little as 10 per cent. If it is an offence to sell skim milk as fresh milk, how much more is it an offence to sell cheese deprived of its fat? Of the 41 waters 20 were good, 6 were of doubtful purity, and 15 were bad. The report was adopted.

STREATHAM AND REFUSE REMOVAL.

Streatham has been wallowing in outbreaks of scarlatina and other infantile diseases, many private schools having been almost emptied of their scholars. The connection between dirt and disease is one of which the Streatham authorities appear to be utterly oblivious. During the present hot weather the Strand Board of Works, in many parts removes refuse daily, and in none neglects it for a week. This is the kind of enlightened attention the public servants give democratic poverty in Drury Lane, and is what every district body ought to do. But Wandsworth District Board of Works has a different opinion of the kind of attention denizens of wealthy Streatham ought to get, and judging by the very able manner in which they show the public in Streatham how *not to do it* there is scant cause for wonder that there have been the outbreaks of disease to which we referred. A Streatham resident gives a strong illustration of the laxity of the officials. In respect to removal of dust the Streatham surveyor's department are, it appears, under the domination of a contractor, whose contract provides only for a fortnightly collection, and often for a week or more at a time the unfortunate ratepayers and occupiers of this much mismanaged district may revel in a choice assortment of stercorae from putrescent and other matter. A special committee of the Board has employed its gigantic collective brain upon the problem of a more frequent collection, but either the contractor or surveyor is apparently what the late John Leech called a "harbitorious gent," and requests to abate a nuisance that is offensive and dangerous to public health, and that shows Streatham as being scandalously behind the times in a Sanitary sense are peremptorily refused. There are already more than enough unlet mansions, &c., in the Streatham district, and if the Board's committee be well advised and far-seeing it will take prompt steps to remedy insanitary practices like those referred to which are not only dangerous to public health but have the effect of driving occupants from what ought to be, one of the most desirable residential places in London. It is time the Wandsworth Board in this matter, took the contractor bull by the horns, or determined to do its work itself in a proper manner for the ratepayers interests. We see small cause for wonder at the agitation against very high rates whilst this sort of practice is tolerated.

GUILDFORD TOWN COUNCIL AND FOOD AND DRUGS.

The Food and Drugs Committee reported that 18 samples were submitted for analysis during the past quarter, all of which were declared to be genuine. The samples were: 3 butter, 2 mustard, 4 whisky, and one each of lard, sugar, pepper, sweets, arrowroot, sago, flour, brandy, and gin.

WANDSWORTH BOARD OF WORKS.

The Inspector under these Acts reported: "That seven samples of milk, two of pepper, and two of butter, purchased in the parishes of Putney, Streatham, Tooting, and Wandsworth, have been analysed, and that such samples are reported to be genuine, except one of the samples of milk, which is under process."

KAYE'S ESSENCE OF LINSEED.

At Dublin, on August 4th, Mr. Leonard, grocer, Clanbrassil-street, was summoned at the instance of the Pharmaceutical Society for having sold medicine known as "Kaye's Compound Essence of Aniseed," contrary, as alleged, to the Pharmacy Acts. Mr. Murehison, of Messrs. Casey and Clay, solicitors for the Pharmaceutical Society of Ireland, said they were not in a position to go on with the case, owing to the absence from town of the counsel for the society and Mr. Clay. Mr. Jellett (instructed by Messrs. Beauchamp and Company), who appeared for Mr. Leonard, said that Messrs. Kaye Brothers, manufacturers of the medicine in question, were prepared to prove that it was not a poison, but was a patent medicine. He contended that it would have been easy for the society to have instructed counsel, and asked to have the case dismissed with costs. The Magistrate made an order dismissing the case, owing to the absence of counsel for the plaintiffs, with £5 costs, being the limit under the Act which he was empowered to give.

THE FOOD SUPPLIES OF NANSEN'S EXPEDITION.

So many firms at home and abroad have laid claim to having supplied the foods for the Nansen Expedition, that if the public were to credit the assertions of rival manufacturers, Dr. Nansen's Expedition must have been "exclusively" supplied by scores of firms and he must have taken with him food enough for his Expedition for some hundreds of years. For the information of other voyagers and of the public it is as well to say that the bulk of the professions of having victualled the Nansen Expedition are absolutely untrue. Dr. Nansen is an expert upon the food question, and made an exhaustive enquiry into the relative merits of various foods before deciding upon victualling of the expedition. He had ideas of his own as to the kind of concentrated nourishment his crew would need, and he personally instructed the Bovril Co. to prepare a special emergency food for the Expedition. In addition, he purchased and paid for a five years' supply of Bovril and Vril Food. Our analyses some time ago showed the exceptionally high percentage of nourishment contained in Bovril, and there is no doubt that Dr. Nansen showed considerable foresight in obtaining his supplies of concentrated nourishment from the Bovril Company.

ACCIDENTAL ARSENICAL POISONING.

A strange case of poisoning has occurred at Millooh Farm, Hollybush, in which thirty persons were effected. A threshing mill was working at the farm, and a large number of hands, principally people from the district, were employed. The whole company, including the members of Mr. Petrie's family, were provided with dinner, and were soon afterwards exhibiting all the signs of poisoning, several being completely prostrated. Inquiry showed, it is alleged, that an old kettle, which had done service for the preparation of a sheep dip containing arsenic, had been used to boil water for cooking purposes. Two medical gentlemen from the neighbourhood were called in, and the sufferers relieved, and all were so far recovered as to be out of danger, with the exception of one of Mr. Petrie's sons, who is still very ill.

UN SOUND FOOD.

At the Northampton Borough Petty Sessions, on August 11th, Lewis Sherwin, dealer, 15, Grafton-place, was summoned for an offence against the Public Health Act, by being the owner of the bad meat exposed for sale. Lewis Sherwin was further summoned for an offence against the Northampton Market bye-laws by offering bad meat for sale on July 15th, and Leete was summoned for causing the meat to be brought into the market. Mr. W. B. D. Adkins (instructed by Mr. W. B. Shoosmith) appeared to prosecute: Mr. G. J. Phillips defended Sherwin, and Mr. A. J. Darnell defended Leete. On the application of Mr. Adkins, the notes of the evidence taken last Friday were read over. Mr. Chignell, assistant to Mr. Cogan, Medical Officer, said he saw the meat, which was in an emaciated condition, wet, soft, and unsound. The fat was in a liquid condition and from the meat as a whole there was an offensive odour. It was utterly unfit for human food. By Mr. Phillips: It might have been slaughtered on the Wednesday. It was evidently the carcass of a beast that wasted away. Witness held no official position under the Corporation. Harry Lines, employed at the London and North-Western Railway, said he saw Leete bring in a hamper of meat, which was fetched away by Sherwin, with whom were two other men. Mr. Phillips, for Sherwin, said the meat was allowed to be put upon his stall by Leete only upon the assurance, made by Leete, that it was the meat of a "waster," and fit for consumption. Sherwin had no interest in the sale; not a copper coin was to benefit him. By Leete's own statement Sherwin was to have none of the profits—only the blame. Mr. Darnell said the beast was slaughtered on the Wednesday, and was fit for food. But even if the Bench came to the conclusion that it was unfit there was no evidence that Leete sold the carcass to Sherwin for the purpose of human food. The evidence was that he sold it to Sherwin "to do the best he could with it," and from that it did not follow that he sold it for human food. Wm. Storer, a Thrapston butcher, said the beast was in good condition when it was slaughtered on the Wednesday. It remained in his slaughter-house till Friday evening, when it was fetched away. Witness helped to pack the meat, and it was then in a firm and dry condition. The freshness of grass and weakness of the bowels made a beast waste, and become a "skitter,"

A "skitter" was fit for human food if it was killed in time. By Mr. Adkins: Leete did not offer the beast to witness as a butcher, and witness did not say to Inspector Dykes that Leete did offer it to him. He did not tell witness that he was going to send it to Northampton market; he asked witness to pack it up for him, and said the trolleyman would call for it. Mr. Adkins: Did you tell anybody that you killed the beast on the Wednesday because it would not live till the Friday? Witness: No, sir. The Bench retired, and on their return the Chairman said they considered the meat unfit for food. They expressed their surprise that Leete had not called the man from whom he purchased the beast, as the case was adjourned last week for his attendance. Leete was liable to a fine of £20 for each piece of the meat he offered for sale. He would be fined £30 and costs £1 0s. 6d., or two months imprisonment with hard labour. Sherwin had the meat on his stall for sale, and they must fine him £5 and costs 16s. 6d., or one month with hard labour. Mr. Darnell gave notice of appeal on behalf of Leete, but afterwards withdrew it, the Bench allowing 14 days to pay. Sherwin paid the fine.

At Warrington, on August 14th, John Massey, tripe boiler, was summoned for preparing the carcass of a diseased cow unfit for human food, and James Green, farmer, Lovely Lane, was summoned for aiding Massey, and further with cruelty. Mr. Lees, Wigan, defended Massey, and Mr. Arthur Browne defended Green. The Town Clerk prosecuted. In the first two charges the circumstances showed that a cow was seen lying in a pit on Arpley Field in an advanced state of disease from Monday, the 24th ultimo, to the following Thursday without food or water. The Inspector watched it from Wednesday, and on Thursday forenoon Green came to it, and on the advice of Inspector Dowty, of the Humane Society, had the animal killed. In Massey's case Mr. Lees contended that Green sold the carcass to Massey as being sound; the price given was £2. This was denied on the part of Green, the carcass having, on the contrary, been sold to be boiled down into oil. The carcass was concealed amongst straw in a cart, and taken to a slaughter-house in Lachford, where the same afternoon it was skied whilst being dressed, apparently for food. The medical evidence showed the animal to have been in advanced tuberculosis. Massey was fined £5, including costs. The charge against Green for aiding was dismissed, but he was fined £1 and costs for cruelty.

At Carlisle, on August 11th, J. Paterson, of Aglionby-street, was summoned under the Public Health Act for being in possession of four quarters of beef which were unsound and intended for human food on August 2nd. From the evidence of a large number of witnesses it was proved that Paterson had a cow which was very emaciated, driven outside the city boundary and slaughtered at the Midland Railway Slaughter-houses. The Inspector of nuisances for the city having been informed of the occurrence visited the slaughter-houses and found the carcass there. Subsequently he seized it when it was brought inside the city by a railway lorry, the four quarters being each labelled as follows:—"Duncan Perritt, auctioneer and meat salesman, Dead Meat Market, Glasgow." The lungs could not be found after the carcass had been seized. Mr. Brown, the Medical Officer of Health, condemned the meat as unfit for human food, and characterised the flesh as being flabby, unmet, and imperfectly bled. The Magistrates held that the taking of the cow outside the city for slaughtering was a suspicious circumstance, and the destruction of the vital parts was a very serious matter. They could have fined the defendant £20 for each piece or £80 in all, but they would limit the fine to £20 and £2 costs, with the option of three months' hard labour. A week was allowed for payment of the fine.

At Woolwich Police-court, William Edwards, 56, High-street, Woolwich, was summoned by the Local Board for exposing 29 haddock for sale in the Woolwich Market, on July 29th, the same being unfit for human food. Defendant said the seized fish was good and eatable. Mr. Marsham said that he saw the fish when he condemned it, and should have been sorry to have eaten it. He fined the defendant 29s., telling the defendant he was liable for a penalty of £50 for each fish seized.—Thos. Malem, 4, Meeting House-lane, Woolwich, summoned by the Local Board for selling unwholesome pine apples in Woolwich Market, and for obstructing the market Inspector in carrying away the said unwholesome food by pushing him about. The defendant also threw the rotten pine apples at the market watchman. Mr. Marsham fined the defendant 39s., or 14 days.—Fredk. Robinson, 24, Star-street, Canning Town, summoned by the Woolwich Local Board of Health for exposing for sale in Woolwich Market 103 pieces of unwholesome meat, on July 18th. Adar Mackie, Sanitary Inspector, said he seized about 20wt. of meat, packed in two casks, the sitting Magistrate condemning and ordered it to be destroyed. Defendant said he bought the meat in good condition in Smithfield Market the morning of the day on which it was seized. He asked for an adjournment to produce witnesses to that effect. The summons was adjourned till August 15th.

A VINEGAR APPEAL ABANDONED.

Recently the Doncaster Magistrates fined a local tradesman for selling an article as vinegar which was not according to the nature of the article demanded, and the manufacturer, who was represented by Mr. Neal, of Sheffield, gave notice of appeal, recognisances being entered into to prosecute the appeal and to secure payment of costs. Mr. Neal applied yesterday for the recognisances to be vacated as the appeal would not be proceeded with. The Town Clerk agreed, and the application was granted.

At Woolwich Police-court, Henry Edwards, grocer and provision dealer, 73 and 74, Plumstead road, appeared to an adjourned summons for exposing 11 pieces of meat for sale on June 29th and 30th. One of the Plumstead Sanitary Inspectors deposed to seizing the meat, which was condemned by the Police Magistrate, and destroyed by his order. Defendant had been in business 27 years and had shops in Woolwich and Plumstead. Defendant called an assistant, who said he had been "born a butcher and had been in the trade all his life." The meat was had in on Tuesday and seized on Thursday and Friday. He denied it was "kegmag," but owned it was sold at 4d. per lb. Charles Baker, chemist's assistant, living two doors from defendant, said he saw the beef and mutton seized and examined it at the request of one of the assistants. It was a "little bit fusty," and he would not like to have eaten it. Mr. Marsham said he satisfied himself that the meat was bad before he condemned it. He made some allowances for the hot weather, and fined the defendant 5s. for each piece and costs, a total of £3 6s.

At the Partick Police-court last week, Bailie Strachan presiding, Catherine Hannah, 111, Maitland-street, Glasgow, was charged with a contravention of the Public Health Act, in respect that on Wednesday last she exposed for sale within the burgh a quantity of haddocks which were unfit for human consumption. She pleaded not guilty, but was convicted on evidence. Sentence was delayed for a week.

At Blackburn, on August 3rd, Joseph Shaw, butcher, was summoned for selling a piece of mutton on the 8th ult. which was diseased and unfit for food. Defendant was further summoned for having in his slaughter-house on the 10th ult. two pieces of diseased meat which were intended for sale as food. A piece of mutton and a carcass were purchased by two persons, and afterwards found to be covered with white spots. Mr. Harrison, Meat Inspector, cross-examined, said he had never had a case like it before. Dr. Wheatley, Medical Officer of Health, said the spots had developed after the sheep had been killed. Mr. Buckley, veterinary surgeon, said there were thousands of spots in four or five patches. When out into they consisted of cysts, which when burst contained a fluid. He had never known a case like it before. For the defence Mr. Riley said Mr. Shaw had not the slightest knowledge that meat was going out of his place to be sold which was injurious to health. Mr. Shaw was staying at Blackpool, and his servant sent out the meat. This particular sheep was one of 48 which Mr. Shaw had purchased from Mr. Grime, one of the Government valuers for Lancashire under the Board of Agriculture. Mr. Grime would tell the Court that Mr. Shaw paid a very high price for these sheep—27s. each. The Chairman said the majority of the Bench were in favour of inflicting a fine of £5 in each case. Speaking for himself, he thought the amount was too much. Dr. Morley said they entirely exonerated Mr. Shaw personally from all blame.

KESTEVEN COUNTY COUNCIL AND THE ADULTERATION OF BEER.

At the last meeting a copy of the following resolution was read, forwarded by Bedfordshire County Council—"That in the opinion of this Council it is desirable that all Vendors of Beer which contains ingredients used in substitution for malt or hops, should be required by law to supply to each purchaser, at the time of delivery, a notice, by a label distinctly and legibly written or printed, with the beer purchased, to the effect that the same is a mixture."

MAGISTERIAL VAGARIES.

The following is a curious illustration of the manner in which some magisterial monstrosities construe the Acts and deter authorities, who strive to suppress adulteration, from doing their duty to the public. In this case the Bench actually fined the County Council for doing its duty, and rewarded a vendor for selling a substance that contained 33 per cent. of chicory as best coffee. We [quote the case from *The Wakefield Express* :—

"John Lord, grocer, Hemsworth, did not answer a charge, at Pontefract, on Saturday, of selling adulterated coffee. Mr. Talbot Kyle, Inspector of Weights and Measures, said that on May 8th, he purchased at defendant's shop ½ lb. of coffee, asking for 'best coffee.' He paid 4d. for it. A portion of it had been analysed, and found to contain 33 per cent. of added chicory. The coffee was wrapped in a paper on which was printed an intimation that the article was sold as coffee and chicory. Witness admitted that the Act laid down that if coffee was sold with a label as coffee and chicory it was no offence; but he asked for 'best coffee,' and did not receive it. The Bench said the answer might be that it was the best coffee they had. It would seem he ought to have asked for pure coffee. Defendant arrived in Court just as the Bench had decided to dismiss the case, and they allowed him 7s. for his expenses and those of his daughter, who attended as a witness."

It is high time that Local Government Board circularised Magistrates upon the manner in which inadequate fines, asinine decisions, stultify Acts designed for the public protection, and that a few of the worst were removed from the Bench.

BATH SANITARY COMMITTEE.

The Inspector reported that out of 27 samples of milk shown, four were of distinctly poor quality, although not necessarily diluted. A sample of cider and one of sherbert had been found genuine.

REFUSING TO SELL FOR ANALYSIS.

At Leamington Borough Police-court, F. S. Bellamy, 14, Villiers-street, was charged with having refused to sell half a pint of new milk to Inspector Austin, under the Food and Drugs Act, on the 21st July. Defendant pleaded not guilty. He was fined 17s. including the costs.

Henry Cundy, of Locoford, was summoned at Chesterfield, on August 10th, for refusing to supply Charles Edward Wood, an Inspector under the Food and Drugs Act, with a pint of milk for analysis. Mr. J. Middleton prosecuted. The Inspector met the defendant on Holywell Cross when Cundy said he had no milk to spare. Cundy, who did not appear, was fined 10s. and costs.

VINEGAR.

At the Shire Hall, Nottingham, on August 12th, William Taylor, greengrocer, of Beeston, was summoned for selling adulterated vinegar. Mr. W. E. Bottrill prosecuted for the County Council. An Inspector of Weights and Measures stated that he visited the defendant's shop on the 17th ult., and purchased some vinegar, which was subsequently proved to be acetic acid. A fine of 20s. was imposed.

CAUTION TO GROCERS.

Beware of dealing in Jams without consulting FOOD & SANITATION. Prosecutions for poisonous colourings and other abominations are taking place throughout the United Kingdom. Do not be duped into buying any Jams save those FOOD & SANITATION says you may safely deal in.

Beware of Vinegars not recommended by FOOD & SANITATION. An Eastern County firm is alleging that a 7d. gallon of Vinegar is pure Malt Vinegar. Grocers will be wise who avoid the bait.

MARGARINE.

At Wednesbury Police-court, on August 8th, before the Stipendiary, Solomon Price, grocer and provision dealer, Potter's-lane, was summoned for selling margarine for butter, for not labelling margarine, and also for neglecting to wrap it in margarine paper. It was shown that butter was asked for, and defendant's wife supplied margarine, at the same time stating that as she had had the "butter" in the shop a fortnight she would only charge at the rate of 11d. a pound. Defendant said he never bought margarine in his life. Mr. Morris said the article sold only contained 4 per cent. of butter. The Stipendiary said the defendant's wife had rendered him liable to fines amounting to £60. It was a very flagrant case, and defendant would be fined 25 and costs in the first case, and would be ordered to pay the costs in the others. The fine and costs amounted to £6 5s.

RUM.

At Whitehaven Police-court, Ashton Roper Linton, 32, innkeeper, Brewers' Arms, Arrowthwaite, was charged by Inspector Blenkinsop with adulterating rum on the 22nd of May last. Mr. Gordon Falcon appeared for the defendant. The case had been adjourned from the previous week. Inspector Blenkinsop, Millom, said that on Monday, the 22nd of May, he purchased a pint of rum for 2s. at the Recreation Ground, in defendant's tent, that being the day of the Colliery sports. He had the liquor analysed, the result of it being the rum was diluted with water to the extent of 33 degrees below proof, and eight degrees below the legal limit. By Mr. Gordon Falcon: There were two counters in the tent, and a good many customers were in the tent when he made the purchase. The counter was damp, and Linton asked him to be supplied from a bottle, but witness said he must be served from the basin the same as other customers. Witness had the option of buying the rum from the bottle. Defendant, after the purchase had been made, wished him to believe that the wet on the counter had got into the rum. He also purchased whisky, which was genuine. For the defence, Mr. Gordon Falcon said he did not deny that the rum had been diluted. Defendant said that before he went down to the sports field he analysed the rum and whisky, and found them all right. Some water was upset on the counter, and the water trickled into the basin. Linton offered Blenkinsop the rum from the other vessel, and, therefore this was not done to the prejudice of the customer, a proof of which he quoted from the late Lord Chief Justice. It was not an offence to sell liquor below the limit if notice was given of that to the purchaser. Defendant had been in the licensing trade at Barrow and Whitehaven for eighteen years, and never had a charge against him all that time, and he submitted as a point of law that there was no case against him. Every one of the other basins were correct, showing this was an accident. The Bench re-called Inspector Blenkinsop, who stated that his attention was called to the wet state of the counter after he had sealed the bottles up. The Chairman said they considered the case proved, and fined the defendant 30s.

Robert Hunt, of the Pear Tree Inn, Pear Tree-road, was summoned at Derby, for selling to the prejudice of the purchaser a quarter of a pint of rum which was not of the nature or quality required, being reduced by the addition of 8-5 parts of water. Mr. Wilkinson, who also visited this house on the 18th of June, gave evidence in support of the summons.—Fined 10s. and costs.

WHISKY.

At Usk Police-court, Benson Taylor, late of the Greyhound Inn, Usk, was summoned for unlawfully selling whisky to the detriment of the purchaser. Mr. H. S. Gustard prosecuted, and Inspector Lewis and Adjuter Oles gave evidence. The certificate of the County Analyst set forth that in the whisky supplied there was only 26.33 per cent. of alcohol, and 73.67 of water; it was 44 degrees under proof, 19 degrees in excess of the maximum allowed by the Act of Parliament. The defendant produced a notice which, he said, was hanging up in the house, declaring that "no alcoholic strength" was guaranteed in the spirits supplied, but this was held to be no defence, since it was not in the room in which the Inspector was served, and no reference was made to it until the purchase was completed. Fined £1 and costs (7s. 6d.)

At the Passage West Petty Sessions, on August 8th, before Messrs. Eyre Powell, T. P. Stammers, J. P. Taylor, and W. P. Clarke, Thomas Fleming, publican, Passage, was charged at the suit of Sergeant Mostyn, the Inspector for the district under the Food and Drugs Act, with an alleged adulteration of whisky. The following was the wording of the summons:—"That on the 14th July, being a person duly licensed for the sale of intoxicating liquors by retail to be consumed on the premises, did unlawfully sell to the said complainant, to his prejudice as purchaser thereof of an article, demanded by said complainant, as such purchaser contrary to the statute, &c." The publican was not professionally represented. Sergeant Mostyn stated the case for the prosecution. He said on the 4th July last he entered the defendant's premises and bought a pint of whisky for 2s. 4d. It was Mrs. Fleming who gave it to him, and he told her he was going to have it analysed. She offered him whisky out of the cask, but he refused. He then got the bottled liquor and divided it into three parts. He handed one to the defendant's wife, and in her presence sealed and marked the others. From the result of the analysis it appeared that in addition to the 25 per cent. of water legally allowed there was 7 per cent. added making a total of 32 per cent. water. The whisky was taken from a quart bottle. The defendant admitted adding water to the whisky, and said he had always done it, but there was never a complaint before. They generally drew a gallon from the cask at the time and bottled it after, adding a pint and a half to the half gallon. He did not know what amount of water was allowed, and it was not until last court day that he heard anything about proof whisky. Mr. Stammers: If you came up to the police they would have told you. In answer to Mr. Clarke, the defendant said that they only put the water into the separate gallon that was drawn off. Mr. Taylor: I suppose you were trying to make a non-intoxicating liquor out of it (laughter). The defendant said he would take care for the future and have only the legal percentage of water. The Bench believing that the defendant acted in ignorance of the Act, imposed only a fine of 5s. and costs.

Wm. Clarke, of the Robin Hood Inn, Crewe, was charged on August 8th, at Crewe Police-court, with selling whisky which was adulterated with 10 per cent. of water over the amount allowed by law, and as not of the nature, substance, and quality demanded and paid for by the purchaser. The case was brought by the County Council Inspector under the Adulteration of Food and Drugs Act. Albert Timmis, Inspector under the Drugs and Food Adulteration Act, said that on 12th July last he called at the Robin Hood Inn, kept by defendant, and asked for a pint of whisky. He paid him for it, and then told defendant that he was an Inspector under the Food and Drugs Act. According to the Act he divided the whisky into three portions, corked and sealed them all, handed one of them to the defendant, kept the other which he now produced, and sent the other to the Public Analyst, who returned a certificate to the effect that the whisky contained 35 per cent. of water, or 10 per cent. more than was allowed by Act of Parliament. In cross-examination witness stated that defendant asked him to remove the seals and allow him to put some stronger whisky in. Mr. Chester addressed the bench, stating that the whole matter was a mistake. William Clark, landlord of the Robin Hood, said he was refilling his whisky keg on the day in question. In the midst of the operation he was called away. He had put three gallons of whisky into the cask, and he called out to his wife that he was filling the cask. Three quarts of water was the proper amount to put to three gallons of whisky, but his wife, thinking he had filled the cask which held six gallons, put in six quarts. He sold the whisky to Timmis not knowing that the water had been put in. Caroline Clark said her husband was called to the bar, while he was filling a whisky keg. She put three quarts of water into it while he was away, thinking there were three gallons of whisky in, when in reality there were only six quarts. The bench stated that they were not satisfied that the offence was wilfully committed, and would give the defendant the benefit of the doubt. The case would be dismissed on payment of costs.

At Longtown Police-court, Thomas Little, proprietor of the Half Moon Inn, Scaleby, appeared in answer to a summons for selling whisky adulterated below the legal limit on the 22nd of May, 1893. Defendant pleaded guilty, but in palliation of the offence said it was his annual picnic day and they were exceedingly busy. In answer to the Bench defendant said he made the whisky weak "to assist in keeping order." (Laughter.) He was "advocating temperance." (Renewed laughter.) Supt. Lancaster deposed that he purchased one pint of Scotch whisky from the defendant on the 22nd of May last. He told defendant he wanted it for the purpose of analysis. It was the picnic day at defendant's house when he purchased the spirit. He had received a report (produced) from the Analyst, which showed the whisky to be four degrees below the lowest legal limit. The Bench took a lenient view of the case, and imposed a penalty of £1 and costs, in all £1 15s.

At the Youghal Petty Sessions, before General E. L. Dillon, Sergeant Michael Slattery summoned James Myers, publican, Tallow-street, Youghal, for selling adulterated whisky. Sergeant Slattery deposed that he was Inspector under the Food and Drugs Act at Youghal. On the 17th July last he purchased a pint of whisky from the defendant, which he divided into three parts. He gave the accused one, he forwarded another to the County Analyst for the purpose of analysis, and retained the other part himself. He produced the certificate of the analysis, which showed the sample to be 52.16 per cent. proof whisky, the lowest legal percentage being 75 per cent. whisky. The defendant's daughter, Anastasia Myers swore that her father received a cask containing 21 gallons of whisky in February last, to which she added six gallons of water, as was their custom when getting such a quantity. No one else was authorised to put water in the proof whisky. The defendant was sworn and corroborated the evidence. Maurice Mulcahy deposed that he had 23 years' experience of the licensing business, and from the permit shown to him six gallons of water, properly blended, would not injuriously affect the quality of 21 gallons of whisky, but if not properly blended or mixed, a quantity of whisky may be more diluted with water than other parts. Mr. A. J. Spratt, Solicitor, defended the accused. General Dillon, in announcing the decision, stated he felt it his duty to impose a heavy fine as the whisky was 48 per cent. under proof. On this account he was disposed to fine the defendant £5, but on the representation of Mr. Spratt that the accused had no fraudulent intent, and that his house had been well conducted, and being the first case of the kind heard here, he would impose a fine of £2 and costs.

Mary Ann Rogers, innkeeper, Hope Valley, was charged with an offence against the Food and Drugs Act. Police-constable Smith stated that on the 26th of June he visited the Tankerville Arms, Hope Valley, and purchased a pint of Irish whisky. Witness paid defendant 2s. 3d. for the whisky, and told defendant that he had purchased it for the purpose of analysis. Defendant said the whisky was the same as when she bought it. The whisky was subsequently analysed by Mr. T. P. Blunt, of Shrewsbury, and witness produced his certificate, which showed that the whisky was 48 degrees under proof, which was 30 degrees less than what was allowed by law. Defendant said she ran short of whisky and purchased a quart from Mr. Jones, of Hopesgate. This was the whisky which was served to the constable. Defendant was fined £1, and the license was endorsed.

At Ballymena Petty Sessions, on July 28th, Robert Havern, publican, Ballymena, was charged by Acting-Sergeant M'Gibney, Inspector of Foods and Drugs, for having sold adulterated whisky, on Crebilly Hill, on the fair day, on the 26th June. Defendant was fined 10s. and costs.

At Retford Borough Police-court, on July 24th, James Hopkinson, of the Clinton Arms, Albert-road, was charged with selling whisky "not of the substance and quality demanded," on June 19th. Mr. Charles appeared for the defence. George Ernest Garforth, Inspector of weights and measures, said that on the day named his servant purchased eight pennyworth of whisky at the Clinton Arms, from defendant's daughter. He went in and informed her that he was the Inspector under the Food and Drugs Act, and that he had purchased the whisky to be analysed. He divided the whisky into three parts. Defendant's daughter had one part, witness kept another, and the third part he sent to the Public Analyst. On July 1st, he received his report, which he produced. This stated that it was adulterated whisky, consisting of 100 parts of the lowest legal strength and 8 parts of added water. There was no notice in the tap room where he was served that the spirits were sold as diluted. Cross-examined: Defendant's daughter took him into another room and showed him a placard stating that spirits were sold under proof. It was not in the room in which he was served. The notice was not facing him as he entered the house. He was not shown the notice before he sealed the bottles. Wm. Fells said he purchased the whisky for Mr. Garforth. He purchased it in a room on the right as he went in. There was no notice about whisky being diluted in the room. Mr. Charles, for the defence, cited a case in which it was held that the notice need not be in the same room in which the customer was served, and also produced the remains of the whisky from the keg, which he tested in Court, and contended was only then two degrees below 25 under proof (the legal strength) in spite of the fact that it was the last of the keg and had been subject to considerable evaporation. Lizzie Hopkinson, daughter of the defendant, said their usual custom was to make the whisky 23 under proof. She supplied the whisky to Mr. Garforth's man. The keg was almost empty. When Mr. Garforth came in and told her who he was, she pointed out the card to him. It was on the shelf in the bar. In coming in the front door the notice was in view. The whisky produced was that which came out of the keg. Her father had kept the house nearly 12 years. Fells went into the tap room. The Bench retired for a few minutes, and on their return defendant was fined 1s. and costs.—George Tudor, of the Railway Inn, was also charged with selling adulterated whisky on the same date. Defendant pleaded guilty. He was away from home at the time, and the whisky running out his sister had mixed some to the best of her knowledge. The Analyst's certificate showed that the sample consisted of 100 parts of whisky of the lowest legal strength and 31 parts of added water. Defendant was fined 10s. and costs.—William Shaw, of the Angel Inn, also pleaded guilty to a similar offence. The certificate in this case showed 11 parts of added water. Fined 10s. and costs.

MILK.

MR. HANDSLEY AND THE WARRANTY AGAIN.

At Bow-street, on August 11th, E. Handsley, dairyman, 79, Copenhagen-street, Islington, appeared to a summons charging him with selling milk adulterated with added water to the extent of 10 per cent. Mr. Jones, Clerk to the Board of Works for the St. Giles's District, appeared in support of the summons. Mr. Ricketts was for the defendant. It was proved that one of the defendant's servants sold milk which had been diluted to the extent of 10 per cent. The defence was that the milk was supplied by a farmer in Derbyshire under an agreement including a warranty. Each can of milk was accompanied by a certificate from the farmer to the effect that the milk was pure. Witnesses having been called to show that the milk had not been tampered with after its delivery in London, the case was dismissed. Mr. Ricketts applied for costs. Sir John Bridge: No, I shall not allow costs. It was a *bona fide* prosecution in the interest of the public. I should like to know whether the season we have had and the difficulty of procuring good food, account for the poorness of milk. Mr. T. H. Redwood, an Analyst, who had given evidence for the defence, said in his opinion the scarcity of food affected the quantity but not the quality of milk. At the request of Mr. Jones, Sir John Bridge granted a summons against the farmer who supplied the milk. Yet we have Mr. Plowden counselling milk vendors to shield themselves behind the warranty which, in this, and scores of instances defeated the ends of justice. When will the eyes of our parliamentary imposters be opened to the real nature of the warranty game?

MR. ENDERLEY HANDSLEY'S WARRANTY AGAIN.

At West London Police-court last week, Enderley Handsley, trading as the Callow Park Farm Dairy Company, was summoned for selling milk adulterated to the extent of 7 per cent. The prosecution was at the instance of the Hammersmith Vestry for whom Mr. W. P. Cookburn appeared. Mr. Ricketts defended and brought evidence to show that a warranty was given with the milk and that it was sold as delivered. The summons was dismissed.—James Bail, of 96, Goldhawk-road, was summoned for selling milk adulterated to the extent of 9 per cent., and was fined 20s.

THE WARRANTY AGAIN.

At the West London Police-court, on August 11th, Charles Wheeler, 56, Boscombe-road, Shepherd's Bush, appeared to answer to a summons taken out by Mr. J. H. Clarke, Inspector under the Adulteration Acts, for having sold milk at Chiswick on the 18th ult. from which 10 per cent. of fat had been abstracted. Mr. R. F. Finnis, Clerk to the Local Board, supported the summons; and Mr. F. W. Ricketts defended. Inspector Clarke having proved the purchase, the solicitor for the defence said that his client had protected himself by a warranty. The defendant and his servant were called, and both declared they had sold the milk in the same state in which they had received it. Cross-examined by Mr. Finnis: The defendant admitted that he had been fined heavily on two previous occasions for similar offences. Mr. A. C. Plowden, the Magistrate, said the fact that defendant had been fined on two occasions, was by no means a recommendation to him. It was his (the Magistrate's) duty to waive previous convictions in this case, and as the warrant was produced he must dismiss the summons.—Thomas Hutchings, 28, Fisher's-lane, Chiswick, also appeared for having sold milk adulterated to the extent of 20 per cent. by the addition of water. Defendant pleaded not guilty, and said he sold the milk in the same state as he received it. Mr. Plowden, however, informed defendant that unless he protected himself by a warranty, he must be held responsible, and as he had been convicted on two previous occasions, he would be fined 40s. and 12s. 6d. costs.—Thomas John Wilson, of 4, Church-street, Chiswick, was also summoned for a similar offence—namely, for selling milk, on the 13th July, to Inspector Clarke, which contained 10 per cent. of added water. Defendant said that he was unable to obtain a warranty with his milk, he, however, sold it in the same state in which it was delivered to him, the milk in question had been submitted to a process of scalding in order to keep it. He admitted that he had before been heavily fined. Mr. Finnis pointed out that the defendant sold milk in a poor locality, in which case the Local Board were determined to check adulteration. Fined 40s. and 12s. 6d. costs. The defendant asked the magistrate to allow him time to pay. Mr. Plowden: Certainly not. I consider you have been dealt with in a lenient manner. If you cannot protect yourself by a warranty, you must take the consequences.—George Arnold, of 2, Windmill-place, Chiswick, appeared for a similar offence, namely 10 per cent. of water added to milk sold by him on the 13th July. Mr. Finnis said that the defendant had been fined before upon a summons issued by the County Inspector, but this was the first sample of milk found adulterated by the Local Board's Inspector. He was fined 10s. and 12s. 6d. costs.

At South-Western Police-court, London, Herbert George Young, of 45, Kilton-street, Battersea-park-road, was summoned at the instance of the Vestry of St. Mary, Battersea, for selling milk adulterated to the extent of 21 per cent. of added water. Mr. Isaac Young, the Inspector, proved the case, and a fine of 40s. was imposed.—T. Busby, milk-seller, of 83, Park-place, Clapham, was summoned for a similar offence. The milk in this case was adulterated by 12 per cent. of added water, and a fine of 20s. was imposed, in addition to 12s. 6d. costs.

BRISTOL.

The quarterly report of the Public Analyst states that five samples were condemned during the past quarter. Ninety-two were analysed.

At Southwark, on August 4th, Henry Thomas Hornaley, a milk seller, of Bermondsey New-road, was summoned at the instance of Inspector Henry Thomas, Sanitary Inspector to the Bermondsey Vestry, for selling milk adulterated with 15 per cent. of water, and deficient in butter fat to the extent of 10 per cent. Defendant said he could not understand how the milk got adulterated. A fine of £5 was inflicted.—Geo. Clarke, of Grange-road, was fined £5 on the previous day for selling adulterated milk, was again summoned for a similar offence in respect of a different date. He was now fined £5 and 12s. 6d. costs.—Walter Higgins, of Weston-street, Bermondsey, was summoned for selling milk adulterated with five per cent. of added water. A previous conviction was proved, and as the defendant wanted the milk again analysed, the case was adjourned for three weeks.

At Waterford Petty Sessions, Bridget Hearne was summoned for having for sale in the market on Saturday adulterated milk. High Constable Mahony deposed to having sent a sample of the milk to Sir Charles Cameron, who certified that it contained 16 per cent. of water above the quantity allowed. The defence was that the milk had been purchased by the defendant from another person. The Bench fined the defendant 20s. and costs.

Alexander Boyd, a milk vendor, was summoned at Derry, on August 10th, for selling buttermilk which contained 27½ per cent. of added water. Another milk vendor named Wm. Kelly was defendant under a similar prosecution, his buttermilk containing 28½ per cent. of water. Defendants were fined 15s. each with costs.

At Liverpool Police-court, on August 9th, before Mr. J. Kinghorn, Deputy Stipendiary, Arthur Handley, farmer of Stamford Heath, near Chester, was summoned for sending for sale to Liverpool milk which on examination was found to contain seven parts of water to every 100 of the poorest milk. Mr. E. Brassey, of Chester, for the defence, said that the milk had been consigned in unlocked cans, and had passed through many hands. The adulteration was caused by the carelessness of the dairymaids in not emptying the cans properly after scalding them. Mr. Moss, prosecuting solicitor, informed his Worship that since May 30, 1888, defendant had been mulcted in penalties of 5s. and costs, 40s. and costs, £5 and costs, and £10 and costs for similar offences. A fine of £10 and costs was imposed. Mr. Kinghorn remarking that if defendant's dairymaids would leave water in the cans he must suffer for it.—Joseph Hughes, farmer, Dunham Hill, was summoned for sending milk for sale to Liverpool which was found to be adulterated with water to the extent of seven parts to every 100 of the poorest milk. A fine of 20s. and costs was imposed.

William Henry Ernest Cloak, son of Joseph Cloak, was summoned at Falmouth on August 10th, for unlawfully selling, to the prejudice of Inspector Beare, milk which was adulterated with 10 per cent. of water on the 21st ult. The Inspector said he saw the defendant selling the milk at Smithick-hill. Witness asked him for a pint and a half, which defendant sold to him, charging 2½d. Witness told him he purchased it for the purpose of having it analysed, and it was found to contain 10 per cent. of water. Mr. Cloak, defendant's father, said he did not know how the water got in the milk. He had been short lately and had been compelled to purchase quantities from other people to supply his customers. Fined £2, 10s. Analyst's fee, and 11s. costs.

At Westminster Police-court Mr. Morgan Morgan, one of the partners of the firm of Morgan Bros., vendors of milk, of 60, Rochester-row, appeared in answer to a summons which had been issued against him under the Food and Drugs Act, for that he, on the 19th July last, did sell milk which had been adulterated by the admixture of 6 per cent. of extraneous water. Mr. Ricketts defended, whilst the Vestry of the Parish of St. George's, by whom the summons had been taken out, was represented by Mr. Hitchins. Mr. Hitchins stated that the case was similar to the last one, the only difference being that the other one was 14 per cent. whilst the one now under consideration was 6 per cent. Mr. Ricketts: A great difference I should think. (Laughter.) Mr. Harry Herriott, one of the Inspectors of the Food and Drugs Act for the Vestry of St. George's, Hanover-square, deposed that he met Mr. Morgan in Lupus-street, on the 19th ult., with his milk cart. He asked for one pint of milk for which he paid 2d. The purchase completed he told the defendant that he had bought the milk for the purpose of having it analysed by the Public Analyst, and he then divided it into three parts and sealed each part separately. Mr. Morgan retained one, witness another which he produced, and the third was sent to the Public Analyst. He received the produced certificate, showing that the sample contained an admixture of six per cent. of water. Mr. Ricketts: Have you taken samples of Mr. Morgan's milk before? Witness: No, sir. And you have searched the records of all your predecessors and found nothing? Well, Mr.— Well, you have caused to be searched, if you like it that way best? Yes, I have. Are you aware that the defendant has never been summoned before for the sixteen years that he has been in business? Witness did not answer. Was the defendant present when you divided the milk? Yes. Defendant: That is untrue. Was it not a wet day? Yes, I believe it was. Mr. Ricketts contended that the small admixture was due to the rain. The large milk can was opened every time a customer purchased any of its contents, and then it was supposed that the Inspector carried the jug with the milk which he had purchased in 60 yards during the whole of the time it was raining. Mr. Hitchins said that during the summer his friend had complained of the dry weather, and he now complained of the wet. Mr. Shiel said he could not take into account what Mr. Ricketts had suggested, and the defendant would have to pay a fine of 20s., and 12s. 6d. costs.

Edward Johnston, Grey Flatt, was summoned at Carlyle for selling weak milk on the 18th ult. Mr. Collingwood, Town Clerk, prosecuted, and called Mr. Hill, Sanitary Inspector for the city. He deposed that he purchased some milk from the defendant on the date named for the purpose of analysis. A portion of the sample was sent to Mr. Walker, Public Analyst, whose report showed that 4 per cent. of cream was deficient or had been abstracted. Mr. Errington, who appeared for the defence, cross-examined with the view of showing that the milk was from back-end calvers, and that defendant had offered to take the Inspector to the cows and have the milk analysed. He asked the bench to order the milk to be sent to Somerset House for analysis, as they had the power to do under the Act. He admitted that the cream was deficient, but denied that it had been abstracted. The Clerk (Mr. Cartmell) said it was not an offence under the Act if the cream had not been abstracted. The certificate of the analyst did not show that it had been abstracted. The Bench dismissed the case, and the Town Clerk intimated that he should appeal.

BRANDY.

At Derby Borough Police Court, Elizabeth Warrington, keeper of the Grange Inn, Malcolm-street, was summoned for selling to the prejudice of the purchaser a quarter of a pint of brandy not of the quality and substance demanded.—Mr. Coxon (Messrs. Gadsby and Coxon) appeared in support of the summons. Mr. Wilkinson, the Inspector under the Food and Drugs Act, proved calling at the defendant's house on the 18th June, and obtaining the sample which had been analysed. It was found that there were 8·6 of added water to 100 parts of brandy of the lowest legal strength.—Mr. Clifford appeared on behalf of the defendant, and expressed regret that an error had been made. He submitted that a small penalty would be sufficient to meet the case. Fined 10s. and 18s. costs.

COFFEE.

At Wolverhampton, on August 4th, Enoch Aston, grocer, Lower Gornal, was fined 40s. and the costs, for selling as coffee a mixture containing 85 per cent. of chicory.

At Brownhills Petty Sessions, George Trawford, grocer, Watling-street, Brownhills, was fined £3 9s. 6d., including costs, for selling coffee adulterated with 90 per cent. of chicory, on June 2nd. Mr. J. E. Morris, the Inspector, said that the mixture, which defendant had been selling at the rate of 1s. per pound, was really only worth 6½d. a pound.

At Bakewell Petty Sessions, on August 11th, William Poole, grocer, South Church-street, Bakewell, was summoned at the instigation of Col. Shortt, H.M.'s Inspector under the Sale of Food and Drugs Acts, it being alleged that he sold an article of food, to wit, coffee, containing 75 per cent. of chicory. Col. Shortt's assistant, William Marples, stated that he visited the shop occupied by the defendant, whose daughter, a girl of about 14 years, was behind the counter. He asked the child for three ounce tins of "coffee." Three tins were given him. Col. Shortt said that he received the three tins from the last witness on the 8th June. The Clerk: Where were you, Col. Shortt, when it was bought? Col. Shortt: I was outside the door. The last witness had not left the premises when I went in. I told the girl I had bought the coffee to have it analysed and made the usual offer, subsequently dividing it into three parts. I saw that the article was not real coffee, and I asked her if she had sold it as such. She said she had, and she believed it was coffee. After the samples were sealed up I asked the girl to go for her mother. Mrs. Poole came and I told her what had taken place, and I also asked her if it was sold as coffee. She replied she believed it was coffee. I produce the Analyst's report, which I received on the 13th June, stating that the mixture consists of one part of coffee and three parts of chicory, or 75 per cent. of chicory. At this point Mrs. Poole handed to the Bench one of the penny tins of coffee, on the label, in small print was a notification that the contents were a mixture of Bruges coffee and chicory. Col. Shortt submitted that for the sale of the mixture to be legal, the attention of the purchaser must be called to the fact. In this case the purchaser asked to be served with "coffee," and was served with a mixture. The Bench came to the conclusion to dismiss the case on the payment of costs.

At Ekington Petty Sessions, on August 14th, John Stevenson, grocer, Ridgeway, and Oliver Hibbert, grocer, Barbro', were summoned by Colonel W. A. Shortt for selling coffee which was adulterated with 50 per cent. of chicory in Stevenson's case and 60 per cent. in Hibbert's, contrary to the above Act. An "Alderman" of the name of Swallow, and a "Major" of the name of Bowdon "fined" the County Authorities by ordering that in each case costs only should be paid, which is practically "burking" the Acts and encouraging such practices.

At Derry Petty Sessions on August 10th, before Mr. J. J. Pollock and other Magistrates, Robert Bell, retail grocer, was defendant at the prosecution of the Mayor, Aldermen, and Burgesses of the City, for selling coffee adulterated with chicory to the extent of 40 per cent. The prosecution was brought under the Food and Drugs Act. Sub-Sanitary Officer Barr gave evidence of the sale of the article by the defendant, and Professor Leebody, City Analyst, certified to the analysis.—Samuel Laird was summoned for a similar offence, the extent of the adulteration, as certified by analysis, being 85 per cent. Defendants were each fined in £1 and City solicitor's costs. Mr. Crawford M'Coy, City Solicitor, prosecuted.

SHORT WEIGHT IN BREAD.

At Wolverhampton, on August 4th, John Raybould, Lower Gornal, who had sold a 2lb. loaf which was found to be 5oz. deficient, was fined 7s. 6d. and the costs; and Joshua Rushbrook, confectioner, Willenhall, for a like offence, the 2lb. loaf being 1½oz. deficient, was fined 5s. and the costs.

At the Skipton Petty Sessions, on August 12th, Joseph M. Ramsden, landlord of the Cavendish Arms Inn, Embsay, was summoned by Mr. A. Randerson, Local Inspector under the Food and Drugs Act, for selling diluted Scotch and Irish whisky. The Scotch whisky was 81·4 deg. under proof, and the Irish whisky was 28·2 deg. under proof, as against a maximum allowed by law of 25 deg. Defendant, who pleaded ignorance, was fined 10s. and costs in each case.

CORRESPONDENCE.

FOREIGN FLOUR DEPRIVED OF ITS DIASTASE AND GLUTEN; SHOULD IT BE PROHIBITED?

To the EDITOR of FOOD AND SANITATION.

SIR,—For a dozen years I have been appealing through the press, to point out the false conception on which the desire for white bread is based. The Americans, some twenty years ago, ascertained that by removing the diastase, nature's ferment or digestive, and the gluten, the assistant to the diastase, and which are located under the testa or bran cover, and around the germ spot in the grain, the remaining starch flour kept well, and allowed of transportation through warm and moist atmospheres, without undergoing change in colour or in consistency. The roller system of milling was invented to effect this purpose which it does admirably, and the Americans are enabled to retain thus at home, under the heading germ meal, the diastase and gluten which they can utilize to ferment or malt grain such as Maize etc., that have very little of these ingredients naturally. Now it is manifest that a similar Act to the one that applies to milk so as to prevent the abstraction of the cream, should be enforced, if this were so, the Essex wheat land would be again in demand, and a return to grain growing would result. The cry of agriculturists for reductions in taxation and in Railway rates as compared with other industries, is nonsense. In Ireland a few months ago a few extending and therefore over-reaching farmers demanded Imperial credit for purchase of their farms without interest, compulsory sale, and compulsory settlement of rent every two or three years, also bounties and relief of taxes. Manifestly these demands were absurd, but the recommendation to have a due proportion of diastase and gluten in all flour is just and unobjectionable.—Yours faithfully,

JOHN ROCHE, M.D.

COLOURING IN JAMS.

To the EDITOR of FOOD AND SANITATION.

SIR,—With reference to your article on colouring in jams, the *Grocer*, of last week, publishes a letter from the Worcestershire Preserving Company, in which they say: "It is a well-known fact that colouring matter is used by all confectioners and jam makers." We have replied, saying: "This is incorrect so far as we are concerned. We do not use, and never have used, artificial colouring in our jams,—it is quite unnecessary if the fruit is sound and fresh, and the jam properly made."

Yours obediently,

SIDNEY ORD & CO.

1, Southwark-park-road,
London, S.E.

INSPECTOR.—Thanks for copy of paper. Your case seems a very hard one. The tenure of office question is one upon which we feel very strongly, but until Sanitary Inspectors' Associations bring the grievance before the Local Government Board and work strenuously to get parliamentary support for permanent appointments, terminable only by the sanction of the Local Government Board, not much can be done.

CARBOLIC.—We have several samples under analysis, and some of the results are scandalous. They will be published in a few weeks. The powder of which you speak is one that we are dealing with. We agree with you as to the infamy of a firm of supposed high repute, thus misleading purchasers.

C. H. SOUTHWELL BOSTON.—We are sorry copies have gone astray. If you send us a postcard, saying what back numbers you are short of, we will forward them. Thanks for suggestion.

Chafed Skin, Piles, Sores, Chills, Chapped Hands, Neuralgia and Rheumatic Pains, Sore Eyes, Ear-ache, Cuts, Sunburn, Insect Bites or Stings, Throat Colds, and Skin Affections quickly relieved by use of

CALVERT'S CARBOLIC OINTMENT,

Large Pots, 13d. each, with full Instructions.

Court Circular says: "We cannot too highly recommend Calvert's Ointment. It is the best general Ointment with which we are familiar, and ought to be a stock remedy in every household."

Private report from Limassol Cyprus: "I have never found anything to come up to it for neuralgia 'Rheumatic Pains.'"

Samples sent Free by Post on receipt of value.

F. C. CALVERT & CO., MANCHESTER.

Awarded 60 Gold and Silver Medals and Diplomas.

DISINFECTION WITH "SANITAS."

A very careful investigation just made by Dr. A. B. GRIFFITHS, proves that "**SANITAS**" DISINFECTANTS, readily

kill all Disease Germs, including the Microbes that cause

CHOLERA, FEVERS & DIPHTHERIA.

"SANITAS" DISINFECTANTS

are Fragrant, Non-poisonous, and do not stain. They embody all the healthful principles of Pine and Eucalyptus Forests, and are the best for general use.

Copies of Dr. GRIFFITHS' REPORT, together with full particulars of

"SANITAS" DISINFECTANTS & "SANITAS" APPLIANCES

Will be sent free on application to

The "SANITAS" Company, Lim., Bethnal Green, LONDON, E.

THE BACON TRADE FRAUDS.

WHEN WILL THE RT. HON. A. J. MUNDELLA DO SOMETHING TO EARN HIS £2,000 PER YEAR.

The Western Morning News says:—

Food and Sanitation waxes fearfully wrath over frauds in the bacon trade. Adulteration and fraud seem to pervade a great many things in these degenerate days, and an unlimited amount of child-like confidence is required before one can feel absolutely sure that he is getting what he has asked and paid for, either in the food or liquor line. But over the bacon trade frauds the journal referred to uses up some of the strongest expressions that the language affords in the expression of its indignation, and asserts that it has now become well-nigh impossible for an Englishman to purchase English bacon in England. During the past month the writer in *Food and Sanitation* has made purchases of bacon from shops in the vicinity of the Strand, and in not one instance has he been able to procure English or Irish bacon "although the lardy, unnutritious, uneatable trash" has been sold to him as prime Wiltshire and best Irish. The greater part of the blame for this condition of affairs is thrown upon the Board of Trade, which fails to carry out the provisions of the Merchandise Marks' Acts. Although the country bristles with frauds and offences against these Acts, there were last year, it is stated, only six prosecutions. With all the fraud that is known to exist, this number, if correct, is absurdly small, and shews the necessity of the department being stirred up in some way or other, if the Merchandise Marks' Acts are to afford the protection they were intended to give.

The Scarborough Post says:—

FOOD AND SANITATION is doing good work in exposing the frauds that meet one on all sides. It is a crying disgrace that hundreds of tons of foreign butter should be sold as British, to the detriment of the English and Irish farmer; it is scandalous that pig's flare should masquerade as clotted cream; it is monstrous that fifty-four Southport butchers should perform such a miracle that three English beasts appeared in a hundred fore-quarters and ribs innumerable. Adulteration and false representation in the matter of food and drink depend for continuance on the gullibility of purchasers, and the winking eyes of Inspectors. Officials can't think of everything, or be ubiquitous; the retailer is in the hands of the wholesale merchant; and the wholesale merchant, as in a recent case, is prepared to take his oath and swear—with unctuous upturning of eyes and thanks to heaven that he is not as other men are—that his wares are as honest as the day. One suit was found out—within a short while of his assurance that his butter was butter came his conviction (fine: £5 and £25 costs); his Wiltshire bacon was not Wiltshire, but Danish. FOOD AND SANITATION has a righteous crusade: in searching out the iniquities of false marking it fights the cause of the hard-pressed agriculturist; and by and bye public opinion may veer to the conviction that the English markets have been sufficiently exploited, and that for the future estate and liquors shall be what they seem.

Food and Sanitation.

SATURDAY, AUGUST 26, 1893.

SOMERSET HOUSE IN THE WITNESS BOX.

SUNDERLAND, a month hence, will afford Public Analysts and Food and Drugs Acts Inspectors an instructive sight. Our readers will remember our pointing out a few months ago that the certificate of the Somerset House Analysts was only an opinion, and that, in the face of our exposures of the absolute scientific incompetence of the Somerset House Analytical Department, any analysis from them should be viewed with the gravest suspicion. To take a certificate emanating from the Government Department as possessing equal value with that of any capable Public Analyst, would be absurd as it would be insulting to science. Yet, only twelve months ago, their certificates were regarded with awe and accepted by Magistrates as the last word in analysis. The whole credit for such not being the case to-day, we can honestly claim as being the result of our exposures of, amongst other shams—the Somerset House one. Step by step, in milk, in butter, in snuff, and in every department of their work, we have proved beyond dispute the utter want of ability to correctly analyse food and other stuffs shown by the Somerset House Chemists. We showed at best that their certificate was only an opinion, and that Magistrates ought not to accept it without calling upon the Somerset House Analysts to appear in the witness box and prove its accuracy in case it did not agree with that of the Public Analyst. Our advice has been taken, and as our readers will see by the following case, Somerset House will at last have its veil snatched away.

"At Sunderland, on August 19th, a case of alleged adulteration of lard which was before the county Magistrates at Sunderland a fortnight ago, again came before the Bench. The defendant in the case was Mrs. Mary Jane Kirtley, of South Hylton, and she was charged with selling on the 18th of June a parcel of lard which was adulterated with 5 per cent. of beef stearine or beef fat. A certificate that the lard was so adulterated was put in from the Durham County Analyst by Mr. Iliff (of the firm of Simey and Iliff), who appeared to prosecute. Against this, Mr. A. T. Crow, junr., who appeared for the defence, produced a certificate from Mr. Campbell-Brown, to the effect that the lard was not adulterated. In these circumstances he suggested that a third sample of the lard should be sent to the Government laboratory at Somerset House. A sealed sample was given to the Clerk of the Court, who sent it up to London. A certificate was sent back, which was handed up to the Bench to-day. As the Chairman said, this was a Government document, bearing a Government stamp, and it certified that the sample of lard bearing the labels described and securely sealed had arrived on the 1st inst., and it was hereby certified that it had been analysed, and the authorities declared that in their opinion the result did not afford evidence of the presence of beef stearine or beef fat. According to the view of Mr. Crow this was the award of an umpire who had been referred to in the undecided state in which the previous hearing left the case. The Magistrates seemed disposed to this view, but Mr. Iliff contended that the certificate of the Analyst of the county was sufficient evidence, but in the case of other Analysts it was necessary that they should attend the Court. In this case the county authorities desired that the Analyst from Somerset House might be called. Mr. Crow asked how a poor widow could be expected to bring a witness from London. Sir Hedworth Williamson (to Mr. Iliff): How do you propose to get over this Government certificate? Mr. Iliff said he proposed to have the Government Analyst in the box and cross-examine him. He added that the County Analyst had actually extracted from the lard the 5 per cent. of beef stearine, and he could be called, and could produce it. Though the Bench seemed greatly impressed with the certificate from Somerset House, they agreed to adjourn the case for a month, so that the Analyst for Lancaster and the Somerset House Analyst might be called."

Twelve months ago such a case would have been impossible and unlooked for. Somerset House referees under the Food and Drugs Acts dominated the Public Analytical world. Magistrates accepted their *ipse dixit*, whilst Public Analysts feared the department and stood aghast at the temerity of the two or three analytical pioneers who dared to impeach the qualifications of the Somerset House referees and openly accuse them of unfairness and incompetence. This was the case although Public Analyst after Public Analyst suffered at the hands of the Somerset House chemists, and not only had their certificates rejected, but prosecutions for actual adulteration failed, and the Public Analysts whose analyses were thus upset lost the confidence of their authorities. Such was the position a year ago when we launched this journal. A year ago there could not be found one Magistrate in England who would look with suspicion upon a certificate emanating from a Government department, and bearing the signature of a F.R.S. and C.B., along with those of other Government chemists. We are proud of having altered all that. Thanks to our exposures of that

Government department, Magistrates have had their eyes opened. An ounce of fact is worth a ton of assertion; for example—

At Warminster Police-court, on July 29th, before Lord Weymouth and other Magistrates, the charges against Thomas Cross, William Henry Payne, and Edward Langley, for selling milk with certain cream abstracted, came on for decision. Mr. Chivers appeared for the prosecution, and Mr. Jones for the defence. A month previously Mr. Gatehouse, the County Analyst, certified that Cross's milk was 88 per cent. deficient in cream, and Payne's and Langley's 25 per cent. deficient. Mr. Jones applied for a Government analysis of the milk left, which was granted. The analysis of Somerset House was now produced, and asserted that Payne's milk was only 3 per cent. deficient, Cross's 17 per cent., and Langley's 14 per cent. Mr. Gatehouse was then called, and stated that the milk was in such a decomposed state when the Somerset House analysed it that it was impossible to make a fair analysis. The Chairman said they believed that the analysis made by Mr. Gatehouse when the milk was fresh was more reliable than that made a month after by Somerset House. Although the Bench did not believe defendants had abstracted anything from the milk, yet they were guilty of selling milk deficient of fat, and they would be fined the nominal sum of 1s. but they would have to pay the costs of the Government analysis.

Had our journal been the organ of a clique or a Society; Public Analysts, Food and Drugs Acts Inspectors, or Sanitary Inspectors, or the official mouthpiece of an association, the successes we have achieved and the confidence we have gained would have been impossible. The power of our journal has sprung from its absolutely unfettered and outspoken independence. It is that which has gained for us unstinted praise from the most honoured heads of the medical profession, from Public Analysts, Food and Drugs Acts Inspectors, Medical Officers of Health, from thousands of wholesale and retail grocers, and the general public. Our independence gave weight to our exposures of the analytical shortcomings of Somerset House, so much so that an inquiry is at present being held into the capacity of that department to act as the referee under the Acts. That it is being conducted privately is wrong, and it may or may not be valuable, impartial, and beneficial to the public, but whatever be its result it is a step in advance, and ours will be the duty to watch and work that the results shall not be permitted to be prejudicial to the public welfare. It will not do to demolish one veiled prophet solely to erect another veiled incompetent imposture as its successor. England must have thoroughly comprehensive Adulteration Acts and able food Analysts as its advisers upon food questions. We must be as well equipped to develop dairy farming in the United Kingdom as Denmark is with its scientists of world-wide repute and far-sighted policies. We cannot be so whilst scientists—unknown and undistinguished,—whom we have irrefutably shown to be incapable of accurate analysis of milk, butter, coffee, or even denatured snuff, are permitted to be the referees under the Adulteration Acts. The millions of pounds that foreigners have drawn from our public by free fraud in food stuffs, must be saved to England. We can honestly say that we have done more real service in giving English, Irish and Scotch produce fair play in our markets than all our politicians, Houses of Parliament, and our extravagant, wasteful, red-tape hives of the "Tite-Barnacles" put together. We have had during the past year to write bitterly upon the idleness and ignorance of Right Hon. ministers, who draw colossal salaries for doing nothing in particular of any benefit to man, woman or child in the unfortunate land they misgovern; but, looking backwards, we can find nothing for which we feel we should offer excuses. Ours is not the work of lashing our spirits to pamper the pride of any of the miserable tribe of the "ins" or "outs." It is a serious question of justice to English, Irish and Scotch workers, of securing for the public, pure, wholesome, and untampered food, grown and manufactured as far as possible in our own land. For the dreary drivel of this or that Right Honourable gentleman we have no stomach. For their miserable twistings, turnings, and quibbles, and their frothy declamation of regard for the public welfare, we have a contempt, which we would find it difficult to express. The minister who would realise Swift's ideal, who would cause two blades of grass to grow where but one grew before, is what England wants, and to our thinking would deserve better of his country than the whole race of wretched party hacks, who make Parliament a talking shop or boxing saloon. Let us hope the day is not far distant when England will have such a minister—an able, far-seeing scientist, at the head of a Ministry of Public Health, enforcing, amongst other necessary laws, a Compulsory Adulteration Act, and the shame and the scandal of adulterated food being sold with impunity in more than two-thirds of the United Kingdom, plundering the public of millions of pounds, shall soon become a memory of the past. The Somerset House department has been one of the greatest of stumbling-blocks in the path of those who would suppress adulteration, and give English and Irish butter, lard, cheese, and other industries, fair play. In a month it will be on its trial. We shall be curious to see the result.

POINTS FOR THOSE INTERESTED IN MR. PLUNKETT'S BILL.

LAWS OF THE UNITED STATES PERTAINING TO THE SALE OF OLEOMARGARINE, BUTTERINE, SUINE, ETC., ETC.

Alabama. An Act approved February 28th, 1887, prohibits the sale of oleomargarine under any but its true name, branded upon the package. In addition each purchaser at the time of purchase must be informed of the nature of the article.

California. By an Act approved March, 1881, it is prohibited to manufacture or sell any article having the semblance of natural butter, and which is not the exclusive product of the dairy, except under its true and appropriate name, and unless each roll or package of such substance has the name distinctly painted, branded or stamped thereon.

Colorado. An act approved April 6th, 1895, provides that no person shall manufacture, import or bring into the State, or sell oleomargarine, butterine, suine, or any other substance made in imitation of or having the semblance of butter, which substance is not made wholly from pure cream or milk, unless he shall first obtain a license for such purpose from the county, town or city within which such manufacture or sale shall be carried on. The license fee to manufacture is \$1,000 per annum; to sell, \$500 per annum. Every package, wrapper or vessel containing a butter substitute must be branded with the appropriate name in four conspicuous places. Hotels, restaurants, boarding houses, etc., serving butter substitutes must keep four notices to that effect conspicuously posted in the dining rooms of their establishments.

Delaware. An Act of February 10th, 1879, as amended March 21st, 1888, prohibits the manufacture or sale of oleomargarine, unless the words "Artificial Butter" be conspicuously upon the tub, box, counter, bench or other vessel or receptacle holding the substance.

Florida. An Act approved February 17th, 1881, makes it a misdemeanor to knowingly or willfully sell spurious preparations as butter, and imposes penalties upon hotel and boarding house keepers who knowingly or willfully, without giving notice to guests at the table, supply spurious butter for the use of such guests.

Georgia. An Act approved September 21st, 1883, prohibits the sale of oleomargarine except under its true name, conspicuously branded upon the package, and also unless the person offering to purchase the article is first informed that it is oleomargarine. In hotels, restaurants, inns or houses of public entertainment serving oleomargarine placards must be posted in the dining rooms, and also in the private rooms of the guests, bearing the following words: "This house uses oleomargarine." These words must also appear upon the bill of fare.

MORE POISONINGS BY TINNED FOOD.

Seven persons were poisoned at West Bromwich by eating tinned sardines on August 19th. Mrs. James, the wife of Mr. A. A. James, Herbert-street, wire worker, and owner of St. George's Wire Works, Paradise-street, purchased a 1s. tin of sardines from a grocer in High-street. They were laid upon the table for tea, and all the children and a gentleman visitor partook of them. Fortunately Mrs. James did not eat any. Mr. James did not come to tea, and two sardines were kept for him. Shortly afterwards the five children, Mr. Boyce (the visitor), and a servant named Charlotte Harris, were taken suddenly ill, and a doctor was sent for. Dr. Lawson was soon in attendance, and ordered all the patients to bed. Yesterday some of the children were able to be dressed, and went downstairs, but Mr. Boyce and the servant are seriously ill. When Mr. James arrived home after tea the rest of the family were ill, and of course he did not eat the two sardines left for him, and they are going to be analysed.

A WARNING TO MILK DEALERS.

At Glasgow Sheriff Summary Court, on August 17th, Sophia Cameron, 167 Centre-street, South Side, was convicted, at the instance of the Local Authority, of having carried on the business of a milk purveyor in a shop which was in direct communication with a sleeping apartment. Mr. John Lindsay, Assistant Clerk of Police, prosecuted. According to the evidence, the respondent, after warning, ceased to sleep behind the shop two months ago, but afterwards returned, and brought her bed with her. Sheriff Birnie imposed a fine of 30s.—John Kelso, 96, Bishop-street, was convicted of a similar offence, it being stated in his case that after being warned he had the communication door nailed up, but recently the door was reopened. He was fined £1.

BRECHIN AND FOOD ANALYSIS.

A report from Mr. Macdougald, City Analyst, was read at Monday night's meeting of the Brechin Police Commission, which stated that only one sample of butter had been forwarded for examination under the Food and Drugs Act. Mr. Murray did not think that the testing of milk throughout the town was well looked after. He could testify that some parties were selling milk of superior quality to what was called cream by other parties. Mr. Laing complained that whisky in the town was not properly analysed. Mr. Murray replied that those who went in for whisky could look to that themselves. Milk was an ordinary article of daily food. (Laughter.) It was remitted to the Committee to enquire into the matter and report.

MR. W. T. STEAD AS A GENUINE PHILANTHROPIST.

Not long ago the great and good man Stead, father confessor to the public in general and spook sponsor in particular, wanted the public to swallow Mattei's quack nostrums. We warned the public then of Mr. Stead's guah. In his *Review of Reviews* he abused the Italian Government for passing a measure to suppress the sale of quack nostrums, and wrote a "penny plain and two-pence coloured" account of the parlous state of Count Mattei living for many years in such dread of assassination at the hands of the medical faculty, that he had been compelled, according to Mr. Stead, to construct, on a summit of a hill, "a veritable fortress, in the heart of which he stored such apparatus as is necessary for compounding his remedies." "There," according to Mr. W. T. Stead, "he has lived for years in a donjon keep, approached by a steel drawbridge at the top of a lofty tower. With a trusty Andrea Ferrara by his bedside, and a tiny toy revolver ready to hand, the Count remains on guard against assassination."

The Italian charlatan whom Mr. Stead thus zealously championed sells about one million phials of granules and about one million bottles of electricities yearly. Out of these swindling, worthless concoctions—*distilled water*, sold at 8s. 9d. per bottle, and phials at 1s. each—Count Mattei clears nearly £100,000 annually, the only necessities for his business being a water tap, a plentiful supply of bottles, and dupes furnished by eulogy of the nature so lavishly showered on the wondrous "cancer" remedies by Mr. Stead and other like ignorant and credulous persons.

The cancer cure being "bust" does not, however, daunt the cheap advertisement hunting Stead, as witness the following:—

WANTED HALF A DOZEN DRUNKARDS.

THE EDITOR OF THE *Daily Chronicle*.

SIR,—Can you help me to half a dozen first-class drunkards? I do not want any of your middling kind of inebriates, who are only a mild nuisance to themselves, and a moderate disgrace to their families. I want some confirmed, hopeless, gin-sodden dipsomaniacs, if possible the sons or daughters of dipsomaniacs, in whose blood there is the hereditary taint of the alcohol crave, and who have spent their lives in a more or less chronic state of alcoholism. I want half a dozen of these supreme examples of the widely prevalent mania of alcoholism, in order to put to a crucial test a remarkable discovery which an acquaintance of mine claims to have made. This gentleman, who was at one time a besotted inebriate is now as sober as a judge, and he assures me that the remedy which cured him will cure anyone who will consent to undergo the treatment. It is not Keeley's gold cure, nor is there any injection into the blood. It does not cost one-half as much as Keeley's treatment, and it is asserted that, unlike all other remedies, it not only destroys the craving for drink, but sets up in the patient such a physical loathing of the taste or smell of alcohol that if unawares he should swallow a spoonful of jelly in the making of which sherry or brandy has been used he becomes violently sick on the spot. I was naturally incredulous, but on making inquiries I was assured by several medical men of good standing that dipsomaniac patients of their own had been cured by this treatment after all other means had failed.

I, therefore, proposed to the holder of this secret that he should put his remedy to a crucial test. He consented, and I appeal through your columns for the human materials for the experiment. I want half a dozen confirmed inebriates, who are willing to undergo the treatment, which, I may state, consists simply in swallowing every hour or two a small dose of the remedy. Even if the experiment is begun when the patient is suffering from delirium tremens, it is claimed to make no difference in the result, provided the remedy is regularly administered.

May I ask you to allow me to appeal to those who know of any such cases to communicate with me, by letter only, giving particulars of the case which they propose to submit, and certifying the willingness of the drunkard to be treated by some competent custodian to see that he undergoes the treatment. The worst cases will naturally have the preference. If in a month they do not lose all taste for drink, and if in three months they are not so alcohol-proof as to be capable of swimming in whisky without tasting a drop, the discoverer of this remedy is willing that judgment should be given against him.

For these test cases the remedy will be supplied gratis with full directions as to treatment. The offer seems a fair one, and considering the number of victims of alcoholism in our midst, I trust you will give publicity to this proposed test.

In conclusion, let me say that I must insist upon all applications being made by letter and not in person. Life and work would alike be impossible if Mowbray House became the Mecca of the dipsomaniacs.—I am, yours truly,

WILLIAM T. STEAD.

Mowbray House, Temple, W.C., August 22.

Has Mr. Stead received a command from his "spooks" to "boom" a "gold cure," as he lauded the Mattei humbug? If he has, then, on his own showing, his "spooks" are inveterate liars, and we would counsel people to fight shy of Mr. Stead and his new nostrum, for the great, good, and genuine philanthropist may be the victim of another charlatan's wiles. No one knowing Mr. Stead could of course imagine him in such an undertaking being other than an innocent, spotless victim.

HYDROCEPHALOUS ISLE OF WIGHT NUPKIN8ES.

As an illustration of how little intelligence it is possible for magistrates to display, the following case from the Isle of Wight is of interest:—

"William Selby Linington, Cross Lanes, was summoned under the Food and Drugs Act for selling adulterated new milk. His son, Francis Walter, appeared for his father, who, he said, was haymaking. Inspector F. Hale stated that on the 18th of July he saw a boy named George Dennett, who was in defendant's employ, delivering milk in Fairlee-road. The boy came to the police station, and witness said to him, "I want a pint of new milk," for which he gave him twopence. He told the lad that he purchased the milk for the purpose of submitting it to the Public Analyst, and divided the pint into three parts, in the usual way. The Magistrates' Clerk read the Analyst's report, which stated that the sample consisted of 82 per cent. of milk, and 18 of water. The Clerk said in round numbers it was four-fifths milk and one-fifth water. In answer to the son, Inspector Hale said he remembered that the 18th was a wet day. Q. Did you notice the condition of the boy? Was he wet through? A. He was wet. Q. You still have milk from the boy? A. Yes. The son said the milk which the boy had they were in the habit of obtaining from Mr. Mew's farm, and it was delivered the same as it was received. He did not doubt the Analyst's report. There was a lot of rain just along then. It was a week before the agricultural show, and the rain was bound to run into the can. (Laughter.) If it had been a fine day he had no doubt but that the milk would have been all right. The boy, George Dennett, aged 15, said he remembered selling the milk to Inspector Hale. Mrs. Linington gave him the milk in his can on the day in question. He left with it at 20 minutes past four, and it was about a quarter to five when he sold the milk to the Inspector. When he started he had a gallon and a half. He believed the milk came from Mr. Mew's. He saw Mr. Mew's boy Phillips bring it. He thought Phillips brought a gallon. The Clerk: Then where did the other come from? Did Mrs. Linington or anyone else put into your can any other milk besides? Witness did not seem to comprehend the questions and made no answer. The son interposed that Mr. Mew's account showed that a gallon and a half was delivered. Supt. Gibson objected to words being put into the boy's mouth. The son produced the can, which, he said, was one of special make, the cover forming a third of the top, and working on a hinge. He explained that every time the boy served a customer the rain which had settled on the top ran into the can. The Mayor: Then by the time the boy returned to your place it would be half milk and half water? A. Yes, sir. (Laughter.) According to the Analyst's report, there was 18 per cent. of water got into the can by the time he got to the Police Station. (Renewed laughter.) His father had sold milk in the town for the past 25 years, and the milk had been analysed several times, and always reported to be of good quality. Fined 10s. and 6s. 6d. costs. Defendant's son: "I'll pay that, rather than let father go to gaol."

It will be seen that the time allowed for the eighteen per cent. of water to enter the can was precisely twenty-five minutes. A little examination of the glaring absurdity of this defence, the ludicrousness of which, by the way, never appeared to suggest itself to the Bench, shows, that supposing the rainfall was even one-tenth of an inch per hour, the amount that could possibly get into the can in twenty-five minutes, if the lid were entirely open, would be less than 0.05 inch of water. As there was 18 per cent. found in the milk the quantity of milk in the can could be only 0.2 inches covering the bottom. But the can was shown to contain a gallon-and-a-half of milk. Yet the Bench, who might be supposed to know something of rainfalls, fined the accused 10s. and 6s. 6d. costs, thus punishing the authorities for bringing the case forward, inasmuch as, without reckoning the cost of the summons, the Analyst's fee alone amounted to more than the costs imposed.

PROPOSED FOOD INSPECTOR FOR ECKINGTON.

On August 17th, a largely attended vestry meeting, called by the overseers, was held to take into consideration a letter which had been received from the Local Government Board by Mr. George Shaw, Clerk to the Rural Sanitary Authority, re the appointment of a Food Inspector for the parish of Eckington. Mr. C. Pollard, overseer, presided. Mr. Francis Shaw read the letter, the purport of which was that it devolved upon the Inspector of Nuisances to discharge all the duties appertaining to that office, and that the Sanitary Authority are not empowered to appoint an Inspector of Nuisances, and to assign to him a portion only of the duties. The Sanitary Authority may, however, appoint an Assistant Inspector of Nuisances to discharge only the duties referred to, but the Board could not sanction such an appointment with a view to the repayment of a moiety of the salary out of the County Fund. After discussion it was unanimously resolved that "No additional Inspector be appointed, and that this meeting requests the present Inspector to visit Eckington market as often as possible."

Rees Bowen, landlord of the Stout Inn, High-street, Swansea, was fined 40s. and costs by the Swansea Magistrates, on August 17th, for selling whisky adulterated to the extent of seven, degrees below the permitted standard.

THE MARKING OF MEAT.

REPORT OF THE COMMITTEE.

The committee recommend that every person dealing in imported meat should register as such, and should affix a notice plainly exhibited over his shop that he is registered as a dealer in imported meat; and that the inspection of retail butchers' shops be made in the same way as under the Food and Drugs Act by duly qualified Inspectors. Complaints are made that the powers conferred upon the Board of Trade by the Act of 1891 are insufficiently exercised for the protection of the interests of consumers and producers of food. The committee therefore recommend that the Act 54 Vic. c. 15, should be extended so as to include the Board of Agriculture, which department is specially charged with watching over those interests. The committee believe that in the case of mutton, the use of a metal tag of sufficient breadth passed through the shank bones of shoulders and legs, and sealed as proposed, would enable the customer desiring to obtain mutton from a particular country to demand that the portion be cut from a carcass bearing the required tag, and at least prevent the possibility of misrepresentation in the sale of the prime joints, while not entailing any material expense on the shipper. As a further security, penalties should be imposed in all cases where these or any other marks are removed before the meat comes into the possession of the consumer, except at his special request. It should be the duty of any Inspectors appointed under the Act to see whether any meat is exposed for sale to which marks have been applied, but subsequently removed or altered. To complete the safeguards to the consumer, it appears desirable to impose similar penalties in cases where home-killed meat is stamped with marks resembling, in such a manner as to be calculated to deceive, those usually affixed to imported meat. In the event of such restrictions being imposed, the committee are of opinion that the penalty in case of conviction should be a heavy one. The extent of the trade and its restriction to a very few companies and firms render it necessary, in order to deter them from what might prove a very profitable fraud, to impose a heavy penalty whenever detected.

POSSIBLE EFFECT ON PRICES.

It is true that such a mode of marking would not be a guarantee to the purchaser of an isolated chop or other portion of the animal. The committee are disposed to believe that after public attention has been called to the system of marking by electric cautery, the improvements of inventors and the experiments of agricultural societies and other bodies interested in this matter, may develop a plan which, either alone or combined with that of affixing metal tags through the shank bones, would still further protect the customer. The committee drew special attention to the possible effect which any system of marking may have on prices. It is impossible to foretell precisely what may be the result of legislation in this direction, but so far as your committee are able to judge, any course which would affix to meat an unmistakable mark of its place of origin would, temporarily at least, produce some variation in price, and some dislocation in the trade. At first it is probable that those butchers who have hitherto supplied customers very largely with imported meat would find it necessary to restrict their purchases for a time to home-grown animals, with a corresponding diminution in their own profits. But most of the witnesses agree that as the imported meat became better known, so would it increase in popularity. While the committee believe that it will be impossible to place before the consumer meat equal in quality to the best that can be grown in these islands, and that consequently such meat will continue to command the top price, they think that there is a large quantity of meat produced in Great Britain of less good quality, which is inferior to the beef imported from America, and even to the mutton imported from New Zealand. The ultimate result, therefore, might be that meat would come to be divided into four general classes, with considerable variation of price. First, the best home-grown meat; secondly, the best imported meat; thirdly, the second-class home-grown meat; and, lastly, the inferior meat, both home-grown and imported. Whereas the third class now stands in point of price ahead of the second, the indication of the country of origin might transpose their values in the market. It was very generally asserted before the committee that the average excellence of imported meat was higher than that of home-grown meat.

"FOOD AND SANITATION" has over 20,000 Readers: Medical Practitioners, Sanitary Inspectors, Food and Drugs Acts Inspectors, Wholesale and Retail Grocers, Weights and Measures Inspectors, Town Clerks, Solicitors concerned with the Food and Drugs and Public Health Acts, Surveyors, Medical Officers of Health, and the General Public.

NOTTINGHAM DAIRYMEN, PROTEST AGAINST THE BURNING OF THE ADULTERATION ACTS IN NOTTS.

On August 18th, a deputation from the Nottingham District Farmers' and Dairymen's Association was received by the Health Committee of the Nottingham Town Council. The delegates were Mr. Allesbrook (Wollaton), vice-president; Mr. Matthews (Wollaton), hon. secretary; Mr. Rippin, and Mr. Tinkler. Mr. Allesbrook, at the request of the Chairman, Alderman Blackburn, explained the object of the deputation. They came at the request of the Association, which was only a few weeks old, but had already upwards of eighty members, and whose object was to promote and protect the interests of those striving to honestly carry on a trade in a pure article of the first necessity to life and health, especially among the young, an article very liable to contamination and deterioration, and they found themselves at a very great disadvantage, because there was being sold in the town as "new milk" that which could not be properly described as such. That which was sold was several meals old—had been perhaps drawn from the cows the day before it was sold—it was mixed with milk from which every particle of cream had been separated by machinery, and it was coloured and treated with antiseptics and then sold in the streets by men calling out "New Milk." The milk was brought from sheds and cows over which there was no control. Probably the committee could not take any action in that matter directly, but the Association asked that effective measures be taken to prevent the public being defrauded, and honest traders being placed at such a discount and disadvantage. Mr. Matthews followed, and asked for more effective inspection of milkshops, milk now being sold in shops where fish, paraffin, fruit, and other things likely to taint milk and to discredit it as an article of diet were kept, when the fault was not in the milk but in the way in which it was treated or ill-treated. Many questions were asked by the members of the Town Council, and by Dr. Boobyer and Mr. Harris, who assured the deputation that their request should have the best attention of the committee, and they would give every assistance they could in the carrying out of the wishes of the Association, as they fully appreciated the great importance of the matter. Mr. Harris said the Officer had taken last year 22 samples of milk at the stations. Mr. Allesbrook, in thanking the committee for their favourable reception and promises of help and their evidently sincere interest in the matter, said with evident endorsement from Town Councillors that 22 samples, taken out of the thousands of consignments of milk, did not indicate excessive vigilance.

ADULTERATION PROSECUTIONS.

MILK.

William Henry Ernest Cloak, was summoned at Falmouth, on August 10th, for unlawfully selling to the prejudice of Inspector Beare, milk which was adulterated with 10 per cent. of water on the 21st ult. The Inspector said he saw the defendant selling the milk at Smith's-hill. Witness asked him for a pint and a-half, which defendant sold to him, charging him 2½d. Witness told him he purchased it for the purpose of having it analysed, and it was found to contain 10 per cent. of water. Mr. Cloak, defendant's father, said he did not know how the water got in the milk. He had been short lately and had been compelled to purchase quantities from other people to supply his customers. Fined £2, 10s. analyst's fee, and 11s. costs.

At Milford Petty Sessions, Henry Davies was charged with selling adulterated milk. P.S. Brinn deposed: On Saturday morning, the 8th ult., I saw the defendant in Charles-street selling milk. I purchased a pint off him. When the sale was completed I informed the defendant that I intended to get it analysed, and divided the pint into three parts in his presence. I put it into three 8 oz bottles, sealed them, gave one to the defendant, kept one myself, and sent the other to the Public Analyst. A few days afterwards I received the sample which had been analysed, with a document which proved it contained ten per cent. of water. The Magistrate's Clerk: Do you admit or deny it? Defendant: I deny it. The defendant was understood to say that he milked the cows himself, and put it in the cans himself, and that he was positive no water was added. The cows had been living upon nothing of late but the branches of trees and cake, which would perhaps decrease the quality of the milk. The cows were starving at the time, but now they were feeding upon their natural food, and probably their milk was better. The Bench: Could any water find its way from the cow? Defendant: I put the milk in the cans myself, and know no water was put with it. Major Roberts: I am prepared to give evidence as to character. The Chairman: I have known him myself for many years. Major Roberts: During the 17 years he has supplied the family we have never had occasion to complain or even suspect that he was selling anything but pure milk. The Magistrate's Clerk: Do you know anything about the milk on this particular occasion? Major Roberts: Nothing beyond having no suspicion as to its quality. The Bench reserved their decision.—J. Williams, proprietor of the Meads dairy, was similarly charged. P.S. Brinn met the servant of the defendant in Charles-street, purchased a quantity of milk, equally divided it into three bottles, giving one to the defendant,

retaining one himself, and sending one to the Analyst. The sample was returned from the Analyst as containing 19 per cent. of water. Mr. Williams, in defence, said his servant milked the cows on the particular occasion, and immediately took it around the town. No water was put with it. The Clerk: The evidence from the Analyst is conclusive. Have you any evidence to offer? Defendant: The only evidence that I could bring would be the little boy who milked the cows and took it straight around the town. I can bring persons who can testify as to the quality of the milk during the last thirteen years. The Bench: You cannot show us how the water got into the milk? Defendant: No. The milk went straight from the cow that morning. The Clerk: You don't know this from your own knowledge? Defendant: No, sir. I never go in the cowshed. The Chairman: Is this little boy in Court? Defendant: No, sir. The Clerk: That would not relieve you; the boy is in your employ. The Bench retired, and on returning the Chairman said they had fully considered the matter. They were extremely sorry to have to adjudicate on cases of this kind, but on the evidence before them, they could do nothing but convict. They knew well the difficulties which cow-keepers had had to contend with in the past, and the expense they had been put to in keeping their cattle alive, but that did not exonerate them. One of the cases was of greater magnitude than the other—the difference between ten per cent. and twenty per cent. was great, and that they had taken into consideration. Milk adulterated as that in the latter case might have an injurious effect, and the defendant in that case would be fined £2 and the costs, whilst in the lesser case they imposed a fine of £1 and the costs.

At Westbury Police-court, on August 14th, before Mr. C. N. P. Phipps and Mr. A. Mackay, Richard Hooper Wilkins, dairyman, Westbury, was summoned by Mr. W. G. Selby, Inspector under the Foods and Drugs Act, for selling milk from which 20 per cent. of its natural fat had been abstracted. Mr. Chivers, of Bradford, prosecuted. The certificate of the Public Analyst was produced, showing that the sample of milk submitted to him had only 2.86 of fat, whereas the Standard adopted was 30 per cent. Evidence for the defence was given showing that the milk had been sold just as it came from the cow. The Bench dismissed the case, but stated their willingness to state a case for the Higher Court.

At Carmarthen Borough Police-court, Mr. Thomas Smith, Superintendent of Police and Inspector under the Food and Drugs Act, prosecuted John Davies (Pentresil) for selling, by his agent, milk on the 19th July, which had been adulterated by adding skimmed milk thereto. Prosecutor said: On Wednesday, 19th July, at 5.15 p.m., I purchased one pint of milk from Mary Davies, daughter of the defendant, in Spilman-street. I paid 1½d. for it. I told her I was taking the milk for the purpose of having it analysed by the Public Analyst. I divided the sample into three parts, corked, and sealed them with the Corporation seal in her presence. I kept one packet myself, I handed her another, and I registered and sent the other to the Public Analyst. Two or three days afterwards the bottle which I kept exploded. I saved about half the sample and put it into another bottle. After a day or two it again exploded, and blew the bottle to pieces. I produce the pieces here to-day. I produce the certificate of the Public Analyst. The certificate set forth that the sample contained 75 per cent. of genuine milk, and 25 per cent. of skimmed milk. In other words the sample was deficient in butter to the extent of 25 per cent. This might have been caused either by partial skimming, or by adding skim milk to fresh. Mr. Thomas Walters, who appeared for the defendant, asked the Inspector what he had asked for. Mr. Smith said he had asked for a pint of milk. He paid 1½d. for it, which was the price of a pint of fresh milk. Mr. Walters contended that there was no case. The Inspector had asked for milk and he had got milk. The learned Clerk (Mr. R. M. Thomas) said that it was not the business of the purchaser to find out; it was the business of the vendor to disclose if the milk was in any way adulterated, if it was sold at the ordinary price of milk. Mr. Walters said he was perfectly within his rights to charge 1½d. per pint for skim milk, and 3d. for fresh milk if he liked. A case had been decided in the Paisley Sheriff Court in which cream had been sold at 1d. per gill. The cream had been found deficient to the extent of 34 per cent. The case had been dismissed, as it had been shown that the article called "cream" was sold at different prices, and of different qualities. Supt. Smith submitted that 1½d. per pint was the usual price of milk in the town. Mr. Walters asked the Clerk to state a case for the Superior Court, in case the decision was against the defendant. The Clerk said that he was quite prepared to do so. The defendant, who was sworn, and gave evidence, said that he sold two kinds of milk. He sold fresh milk at 1½d. per pint, and skim milk at 1d. per pint. Supt. Smith said that the defendant had been fined in the year 1888 for a similar offence. The Magistrates found the case proved, and inflicted a penalty of 20s. and costs.

William Leatherbarrow, carrying on business in Seaforth-road, Seaforth, was summoned on August 19th for having sold new milk which had been watered and deprived of upwards of one-fourth of its cream. Superintendent Walsh supported the information, and Police-constable M'Ginn proved the case. The defendant pleaded that what the Police Officer had purchased was intended for skim milk, for it was not good enough for new. The Constable, however, stated that it was sold as pure new milk. In reply to the Bench, Superintendent Walsh said that on the 15th of October last the defendant had been fined 20s. and costs for selling new milk, of which seven parts were water. The Magistrates now imposed a penalty of £2 and costs, with the alternative of fourteen days' imprisonment.

DEFAUDING ASYLUM INMATES.

At Lancaster Castle, on August 19th, Thomas Melling, farmer, Ellal, was fined 40s. and costs for supplying milk not of the nature and quality demanded. On July 24 Sergeant Dickenson, of Galgate, took samples of all the milk that passed through the township of Sootforth, and he purchased a pint of new milk from Walter Gardner, in the employ of the defendant, as he was taking the milk to the County Asylum. The sample was divided in the usual way, and on analysis by the County Analyst the sample was found to contain 13 parts water to every 100 parts of milk. Mr. Tilley, in defence, said if water had been added, it had been done without the knowledge and consent of the defendant or any responsible person in his employ. He thought the milk might be poor on account of the drought.—Edward Makinson, an Ellal farmer was mulcted in the same sum for a similar breach of the law. The milk, which in this case contained four per cent. of water, was also being taken by Gardner to the County Asylum.

At Stalybridge, on August 17th, a milk dealer was fined £3 for selling milk diluted with ten per cent. of water. The Corporation prosecuted.

At Ashton Borough Police-court, Edmund Flowers, Portland-street, was charged with having sold to Thomas Potter a certain article of food, to wit, a pint of milk, which was not of the substance and quality demanded. The Deputy Town Clerk (Mr. Robinson) prosecuted. He said that the proceedings against defendant had been taken under the Foods and Drugs Act, 1875, which provided that any person who sold an article to the prejudice of the purchaser which was not of the nature, substance and quality demanded was liable to a penalty not exceeding £30. A pint of milk was taken by Mr. Potter, Sanitary Inspector, from defendant's wife on the 17th ult., and after telling her for what purpose he purchased it, he divided the milk into three parts. One part he gave back to Mrs. Flowers, one part he kept himself, and the other he sent to Dr. Estcourt, Analyst, whose certificate showed that the milk had been adulterated by 10 per cent. of water being added. There were 180 milk dealers in Ashton, and if they were to keep the supply pure it was necessary that they should bring persons who adulterated the milk before the Bench. In previous cases they had been satisfied with a nominal penalty, believing—as the Chairman of the Bench remarked on a previous occasion—that the prosecution would act as a deterrent to other milk dealers in the future. Whether the adulteration was carried on to a great extent he could not say, but the Inspector brought offenders to the court when he found them. Whilst he (Mr. Robinson) did not wish for a heavy fine to be imposed upon defendant, he hoped the Bench would impose such a fine as would meet the case. He might add that Flowers had ceased to be a milk dealer since the summons had been issued. Mr. Potter, Sanitary Inspector, gave evidence as to having taken the sample from defendant's wife, and he produced the Analyst's certificate, which showed adulteration to the extent of 10 per cent. Defendant said he would swear that he nor his wife added any water to the milk. The sample of milk which Mr. Potter purchased had been kept from the Sunday to the Monday morning. As the Magistrates perhaps knew, the cream of milk which was kept over night cracked a little, and he could not afford to lose the milk, being a working man. His wife told him that she "seived" the milk through a piece of muslin in order to take the cracked fat off, and the milk thus became deficient in fatty matter. Mr. Robinson said that proceedings had not been taken against defendant because the milk was minus the fatty substance, but there was 10 per cent. of water added. The Bench consulted for some time, and in the end the Chairman said Flowers would be fined £3.

LARD.

At Bristol Police-court, on August 16th, (before Mr. Mark Whitwell and Mr. S. D. Wills), Kate Banbury, 41, Catherine Mead-street, was fined 5s. for selling lard containing beef stearine. Henry Norris, 8, Berkeley-place, Clifton, was summoned for a similar breach of the Food and Drugs Act. Mr. Holman Gregory, who defended, said that grocers bought their lard from the wholesale dealers and sold it in the same condition. The beef stearine was used to stiffen the lard, and was actually a dearer article. A fine of 20s. was imposed. Austin Hart, 34, Berkeley-place, was similarly summoned. Mr. J. Nichols (Benson and Carpenter) appeared for the defendant, and endorsed what Mr. Gregory had said. The magistrates fined the defendant 20s.

SPECIAL NOTICE TO SUBSCRIBERS.

Subscribers are requested to note that Yearly Subscriptions are now due, and should be forwarded forthwith. Back numbers of the Journal are now very scarce, and can only be supplied in future at 3d. per copy. A few complete copies of Vol. I., containing the first 26 numbers may still be had bound in cloth and gold lettered at 7s. 6d. per volume. An index to Vols. I. and II. is in preparation, price 1s. Subscribers requiring index will oblige by communicating with the Publisher. The Index will be complete, giving cross-references to articles, appeals and all convictions, and our readers will readily understand that the charge of 1s. each, by no means defrays the cost of compiling and printing such a large Index as that of Vols. I. and II. of FOOD AND SANITATION.

Subscribers and readers requiring the Index are requested to send their names, and the price 1s., to the publisher at once, as a limited number only will be printed.

CHEESE.

At the Leeds City Police-court, on Thursday the 17th inst., before the Stipendiary Magistrate, Mr. Bruce, Louis Barrett, provision dealer, of 44, High-street, Quarry-hill, Leeds, was summoned for selling to W. B. Walker, on the 29th June, two pounds of cheese, which upon analysis was found to contain at least ninety per cent. of fat other than milk fat, the "cheese" having been prepared from milk deprived of its fat, and to which foreign fat had been added. The Deputy Town Clerk, Mr. C. C. Jolliffe, who prosecuted, stated that Mr. Walker, an Inspector in the service of the Corporation, asked the defendant to sell him two pounds of a cheese which was on the counter of his shop. As Barrett was cutting the cheese he remarked that it was very dry, upon which the Inspector said that he was buying it to be analysed. The defendant then said, "This is not an American, or Oheeshire, or genuine cheese. It is a Scotch cheese." The defendant told the Court that he paid 5½d. a pound for the cheese to a man near Selby, and that he sold it as Scotch cheese at 7d. a pound. Mr. Bruce remarked that as Scotch commodities were usually accounted genuine, to say that this cheese was Scotch and not genuine seemed to be a libel. The maximum penalty in such a case was £20. The case was a very bad one, for the cheese sold by the defendant did not seem to be cheese at all. Barrett sold his cheese to the very poorest class of the community. The rich could protect themselves; the poor required more protection than they, especially as the poor man almost lived on bread and cheese. He should inflict a penalty of £10, including costs. The Defendant: Will you give me time, sir? I was insolvent when I sold the cheese. Mr. Bruce: No, I don't see why I should.

BUTTER.

PLUNDERING THE PAUPERS.

At Dublin, on August 18th, Mr. D. J. Cogan, ex-T. C., 82, Queen-street, was prosecuted by the Guardians of the North Dublin Union under the Food and Drugs Act for having supplied to the North Dublin Union Workhouse on the 15th July a quantity of butter adulterated with 75 per cent. of foreign fats. Mr. J. E. S. Condon (instructed by Mr. G. R. Fitzgerald) appeared for the guardians, and Mr. M. J. Hanmore appeared for the defendant. Mr. Patrick Fitzsimons, Food Clerk in the Union, produced the bond under which the contract was declared with the defendant to supply butter, &c., to the Union, which bond was declared and identified after signature. On the 15th July the defendant supplied 100 lbs. of butter in two pieces, one of 56 lbs. and the other 44 lbs. Witness told the person who brought the butter that he would send a sample of the 56 lbs. packet to be analysed. The City Analyst, Sir Charles A. Cameron, in due course forwarded his certificate of the analysis of a 4 oz. sample submitted to him, in which he said that it "contained at least 75 per cent. of fats foreign to butter, prepared in imitation of butter." Mr. Hanmore said that the bond was invalid, as the £100 penalty was inserted in it after it was signed, and he examined Mr. Cogan, who proved that the figure £100 as penalty for default to carry out the contract was not in the bond at the time he signed it. The bond which he signed bound him to supply pure butter. His Worship said that he considered the case proved, and imposed a fine of £20.

At Southampton Borough Police-court, John Holmes, of 39, Cross-street, Bookery, was summoned by Inspector Powell, for a breach of the Margarine Act, on July 26. Mr. Keele (on behalf of the Town Clerk) appeared for the prosecution, and defendant pleaded guilty, saying the margarine was not served by him personally, as he was in Bournemouth. Taking all the circumstances into consideration, the Bench imposed a penalty of 2s. 6d. and 11s. costs.—William White, of 25, Bell-street, was summoned by Inspector Powell for selling, on July 20th, butter which was not of the nature, substance, and quality demanded, and containing 84 per cent. of fat other than butter. Defendant's wife appeared, and pleaded guilty. In answer to the Bench, the Inspector said he paid 6d. for a half-pound. Mr. Keele appeared for the prosecution in this case also. Defendant's wife said she bought it for butter, and sold it for the same. Fined 20s. and costs.

At Rotherham Borough Police-court, on August 17th, before Mr. E. W. Hodgkinson, Mr. E. Hickmott, and Mr. B. Dyson, a dealer in butter, named Charles Young, was charged that he was the owner of 108lb. of butter, which was disposed of by him in a yard in the occupation of Betsy West, and intended for the food of man, on October 1st, 1891, such butter being unfit for the food of man. Mr. Hickmott (Town Clerk) prosecuted, and said he appeared for the Urban Sanitary Authority in support of the information. The summons was issued in October, 1891, but the defendant failed to appear, and the Bench declined to proceed with the case in the absence of the defendant, and they issued a warrant for his arrest. He had since been apprehended. Mrs. West was a confectioner in the town, and the defendant took a sample of butter, and asked her if she was prepared to buy some of it, as he had a quantity which he had obtained from Mr. Bottomley. The sample of butter was perfectly good for cooking purposes, except that it had been exposed for some time, and was soft. Mrs. West told the defendant that if the bulk was equal to the sample she was prepared to buy it. When the defendant brought the butter it was stinking, and unfit for human consumption. Mrs. West refused to take it, and the defendant raised his fist to strike her, saying he would make her have it, and would sue her in the County Court. She sent for the Sanitary Inspector, and he called in the Medical Officer, and ultimately the Magistrates condemned the butter, and it was destroyed. Witnesses were called, Mrs. West stating that she had agreed to give 6d. per lb. for the butter, and intended to use it for cooking purposes. The defendant said he sold the butter to be used as grease. It was known as grocer's waste. The defendant was fined 40s. and costs.

ACETIC ACID FOR VINEGAR.

Before the Wallasey magistrates, on August 16th, Henry James Rose, Chandler, &c., 43, Trafalgar-road, Egremond, was summoned at the instance of W. J. Hallard, Inspector under the County Council, for selling a weak solution of acetic acid and water for vinegar. Mr. Hallard said, on the 7th July last he asked for a pint of malt vinegar, for which he paid 2d. to Mr. Rose. He divided it in the usual way, and had one portion analysed. The analyst reported "This is not a sample of malt vinegar, but simply a weak solution of acetic acid and water which has been coloured. Assuming the vinegar to be genuine, it contains 18 per cent. of added water."—A medical certificate was put in showing that Mr. Rose was too ill to attend the court. His representative stated that this had been bought for vinegar from the wholesale dealer.—A fine of 10s. and costs, altogether £1 4s. 6d., was imposed, the magistrates stating that it was open to defendant to take such steps as he thought fit against the person from whom he bought the vinegar.

COFFEE.

At West London Police-court, on August 19th, Albert Green, of 615, Harrow-road, was summoned at the instance of the Kensington Vestry for selling coffee adulterated with chicory. Mr. J. W. Stephens appeared on behalf of the vestry to prosecute. Thomas Ebeneser Gabard said that on the 20th of June he went, by the instructions of an Inspector of the Kensington Vestry, to the defendant's shop and asked for half a pound of coffee. He was served by Mrs. Green, who asked him whether he would have sixteenpenny or eighteenpenny coffee. He said sixteenpenny, and was served. The Inspector then came into the shop. Arthur Mendon, an Inspector under the Food and Drugs Act, appointed by the Kensington Vestry, said that, in consequence of certain things which had occurred, he sent the last witness to the defendant's shop to make the purchase. When the witness went in he told the defendant's wife that the coffee had been purchased in order that it might be analysed, and she replied, "If I had known it was for you, I should have given him pure coffee." The sample had been analysed, and the certificate showed that there was 50 per cent. of chicory. The Inspector added that this was a shop which occupied a good position in a poor neighbourhood, where there was practically no competition. A fine of 60s. was imposed with 12s. 6d. costs.

GIN.

At the Barnsley Court House, on August 16th, at the instance of the West Riding County Council, George Torr, landlord of the Sun Inn, South Hindley, was charged with having sold half a pint of gin which was not of the nature, substance, and quality demanded, being 38½ degrees under proof, on the 28th ult. Mr. Rideal defended. Inspector Talbot Kyle deposed to purchasing the gin from the defendant. He sent the sample to Mr. Allen, the Public Analyst, who certified it was 38½ degrees under proof, or 3½ degrees below the standard. Fined 20s. and costs.—Henry Moore, landlord of the Sportsman Inn, Ryhill, was charged under the same Act and on the same day with having sold gin which was 37½ degrees under proof, and whisky which was 32 degrees under proof. Inspector Kyle proved the purchases, and produced the certificates of Mr. Allen, the Public Analyst, stating the samples were under proof as stated, having been adulterated by water. Defendant produced a "tester," which he said had been used by his predecessor, and passed on to him as correct. He now found it was wrong, and had ordered a new one. Fined 30s. and costs.

PAREGORIC.

At Barnsley, on August 16th, Sarah Lambert, grocer, South Hindley, was charged with having sold paregoric which only contained a minute quantity of opium instead of 40 grains, the full proportion. Inspector Kyle proved the purchase of the sample and produced the Analyst's certificate, which proved as stated. Defendant said she sold the paregoric exactly as received from her wholesale grocer. Fined 5s. and costs.—For a like offence Ann Wilkinsons, grocer, Ryhill, was fined 5s. and costs. In this case, Inspector Kyle said according to the Analyst's certificate the sample was wholly destitute of opium—the most important ingredient. Defendant pleaded that the drug was sold as she had received it.

WHISKY.

At Ballyclare Petty Sessions, on August 17th, before Mr. C. R.M.; Mr. M'Meehan, and Mr. J. C. Kirkpatrick, Sergeant Slattery as Inspector of Food and Drugs, summoned Jane Beggs, Ballyclare, for selling to complainant, on the 7th ult., adulterated whisky. The evidence of the Sergeant showed the whisky was 5½ degrees below the strength required by Act of Parliament. Mr. F. Kerr, Ballyclare, who appeared for the defence, explained that the whisky had been in a stock cask for a considerable length of time, which was the cause of its loss of strength. The Magistrates imposed a fine of 10s. and costs.

IMPORTANT TO RETAIL TRADERS.

If you want to know what Food Stuffs you can sell without risk of prosecution, read FOOD AND SANITATION. The large circulation of any Food Journal.

The Grocer who does not subscribe to FOOD AND SANITATION places himself, at the mercy of unscrupulous wholesale dealers. Food and Sanitation costs only 6s. 6d. yearly, post free, and has saved readers from many prosecutions. Send on your 6s. 6d. at once. It begins with the New Volume.

Address, PUBLISHER, "FOOD AND SANITATION,"
183, Strand, London, W.C.

INSPECTOR TYLER ON THE FOOD AND DRUGS ACTS.

On August 19th, in the Council Chamber of the London County Council, Mr. Tyler, the Inspector for the County of Middlesex and the Chairman of the Food and Drugs Committee of the Incorporated Society of Inspectors, read a paper on the "Food and Drugs Acts." Mr. Tyler said:—Considering the rate at which the population of the United Kingdom of Great Britain and Ireland is increasing, and, consequently, thereupon, the great amount of food required for its consumption, the question of the purity of the food is, or should be, one of paramount importance; and to show that efforts are being made to make it such, one has only to take notice of the increase of the number of Inspectors appointed to carry out the duties under the Acts, for, whilst but a few years ago the Acts were not enforced by the local authorities in some counties, they are now. By the County Councils it is done if I may be permitted to say so, in the spirit in which it was intended, and each Council appears to vie with the other in attempting to purge its County of all kinds of adulteration. It does seem a pity, considering the fact that the adulteration question is one of so much moment, that there are not to be found professional gentlemen who will write more books of instructions (as explaining the Acts) than we have, there being at the present time, only two. But as we are now an Incorporated Society, it behoves us to look about and see whether our joint minds cannot fill up the difficulty, so, at the end of this paper, I have appended by way of a beginning an index of decided cases up to date, and certain suggestions to Inspectors as to the way they should go about their duties. The Acts under which we at present work, are the 1875 Act, the 1879 Act, and the Margarine Act—and he would indeed be an exceptional officer who could say that he had them all at his "finger's ends," for the Acts simply bristle with loopholes and pitfalls. The adulteration of bread is now to all intents and purposes a thing of the past, and I take it we must put that down to the drastic manner in which offenders in such cases were dealt with, but what do we find as regards milk, butter, &c. Alas! adulteration is still rampant, and does it not at once occur to any one that if exemplary punishment in the past stamped out the adulteration of bread, surely it might be applied to these other necessities of life. The adulteration of milk has ever appeared to be in the ascendant, and the reason why it is so is I suppose because it is so easy to do. Yet still, although the adulterant is in 99 cases out of 100 only water, it is a very serious matter, as in many cases milk forms the sole food for children and invalids. As regards the adulteration of butter, this has decreased in many parts of the kingdom to a great extent, and I think the Margarine Act has to be thanked for it, as under that Act we know we have great power placed in our hands to check the article sold. A great number of buttermen not caring to have labels placed up in their shops, showing to the public that they deal in a spurious article, wisely refrain from selling it, and this is not to be wondered at, considering the risk they run through the carelessness of their assistants, and also the fact that pure butter can be obtained at a price very little higher than is paid for margarine. And whilst I am speaking about the present Margarine Act, I must say that I consider it has been a great benefit to the public for this reason, that the size of the letters on the wrapper that has to be placed round each package shews at once what the article is the purchaser is purchasing, and I am of opinion that those size letters ought to be made appear on every kind of mixed articles sold, such as coffee, cocoa and condensed milks. Yet, whilst the Margarine Act has done so much good, still there is room for improvement and that appears to be proposed to be attained in the new Margarine Bills, and as I have gone through that Bill very carefully I shall be pleased to refer to it more fully on a future occasion. This paper would be incomplete if reference was not made to the national beverage of this country, viz. beer. I find on search that there have been many strange customs relating to beer, to two of which I should like to call your attention, viz.: "There was a very curious custom called Church Ale. The churchwardens of a parish used to brew about twice a year, and sell the ale at a great profit, and give the money to the poor people, because then they had no poor law, and no poor rates. They were very strict about these Church Ales, and would not allow any one else to brew at the same time that the churchwardens did, neither would they allow any one else to sell ale in the parish until the churchwardens had sold all they had. On one occasion, at Kingston-on-Thames, they cleared nearly one hundred pounds, and the record of it is still to be seen. Another still more remarkable custom was the Bride ale. The friends of the bride used to give her presents, most likely of grain, or something of that kind, and she used to brew the ale, and the first thing they did in church, after the wedding, was to sell the ale to any of the people. The sexton kept two bowls in church on purpose. There he used to bring it out, and the bride sold her ale, pocketed her money, and left." What the beer we drink is made from, I am afraid is unknown to most of us. Why that should be so and why it has been allowed to remain so, for so long a time, has always been to me a profound mystery. Yet this is somewhat accounted for by the fact that Public Analysts have at present, (so far as I am aware) no standard on which to base their opinions which renders it almost impossible for them to decide whether the article is adulterated or not. But, I am glad to find that not only has the Norfolk County Council taken this question in hand but that Mr. Quilter, M.P., has a Bill before the House of Commons, in which the following important clause appears, viz.:—"Every person who sells or exposes for sale, by wholesale or retail, any beer brewed from or containing any ingredients other than hops or malt from barley,

shall keep conspicuously posted at the bar or other place where such beer is sold or exposed for sale a legible notice stating what other ingredients are contained in such beer." "Any person who sells or exposes for sale any such beer as aforesaid without complying with the above enactment, shall be liable to a fine not exceeding in the case of the first offence £5, and in the case of a second or any subsequent offence £20. Any fine incurred under this section may be recovered summarily by any informer, and one half of the fine shall in every case be paid to the informer." I hope that this may pass into law and thereby perhaps be the means of getting the thin edge of the wedge in, to compel all brewers to brew their beer from malt and hops, and then the Public Analysts will have a standard to work by, which they have not now. Perhaps you will permit me to inform you that it is reported that in 1689 gin was hawked in the streets of London at 6d. per quart. What a difference in price to what is paid now, viz.: 4s. The number of prosecutions for adulterating drugs is comparatively very small, and this I take it shows a healthy state of things. But still it is certainly advisable for samples to be occasionally taken so that a check may be kept upon them. I do not wish to weary you by taking up your time in going through in detail the many Adulteration Acts that have been passed, but what I take it you wish to hear, are remarks upon those Acts mostly used in practice, so therefore it is now my intention shortly to refer to the latter and comment upon certain sections in them.

1875 ACT. SECTION 6.

This section is described as being about the most important one in the Act, for under it by far the greatest number of cases are taken. And so important is it that in consequence of the many different decisions given upon it, it was found necessary to pass the amended Act of 1879, so that there should be no mistake as to the construction of the language used therein; but Inspectors still find how loop holes remain which enable offenders to escape its penalties.

SECTION 8.

Deals with that great vexed question as to what constitutes "a label distinctly and legibly written or printed." My idea of getting over the difficulty would be to add after the word "mixed," and such label shall only be a good defence if it is written or printed on paper in capital letters not less than a quarter of an inch square, stating the percentage of each compound part of the article sold, and that no other printed or written matter appear on the same side of the piece of paper." As an instance of the difficulties to be met with under this Section, reference need only be made to the cases of *Otter v. Edgeley*, and *Tyler v. Attfield*. Up to the date of these decisions, the case of *Liddiard and Reece* was always a precedent for Inspectors to work by. The effect of the later decisions is to make it extremely difficult to decide to what extent a label protects a seller.

SECTION 9.

As this Section refers to making disclosure of the abstraction from an article of food of any part of it, before sale, and as it applies more particularly to the sale of new milk, where it is imperative for the seller verbally to declare it to be skim milk—otherwise it is assumed to be sold as "new milk"—surely it naturally should follow that a verbal declaration should be made in the case of the sale of the condensed milk, which in some cases are more than skimmed—they being separated—which is a different article, and in my opinion proceedings might well be taken under Section 6. From the language used in Section 8 it would appear on the face of it that a label is no protection under Section 9, as it refers to offences "aforesaid," which one naturally would conclude could not contemplate any offence created by subsequent sections but as the matter at present stands, by the decision in the case of *Jones v. Davies*, it is held that there is no necessity to make a verbal disclosure, if there is a label on the covering of the article sold, making disclosure of the altered state of the article.

SECTION 12.

When the Act was passed it was supposed to be so simple a one to put into force that this section was inserted so that any one could take proceedings, and yet one hardly ever hears of advantage being taken of it, and is it to be wondered at, considering the fact that even now in 1898, eighteen years after the Act was passed, the most eminent judges and barristers differ in their opinion as to what construction should be placed upon the words in the different sections?

SECTION 13.

As it is under this Section we officers act, I do not think it would be wise for us to support the 18th Clause in the proposed Margarine Bill, and for this reason—we have now power to purchase by our assistants (see *Horder v. Scott*) and therefore I do not think it necessary that certified deputies should be appointed.

SECTION 15.

It is hoped that no Inspector ever falls into the error of dividing a sample unless the offer to do so has been accepted, because to do so, is, as you are aware, fatal to a case.

SECTION 17.

I note with pleasure the report of a case decided in July last by the Judges in Ireland, as to the wording of this Section. They clearly laid it down that an Officer was legally entitled to demand to be served with an article from a wholesale trader in the same manner as the Officer can do so from a retail trader.

SECTIONS 21 AND 22.

No Officer can be too careful to remember that the only certificate that can be received by the Bench is that of the Public Analyst. The practice of foisting upon the Bench that of another Analyst is too frequently done by the defence. When the Somerset House authorities are appealed in a disputed case, the Analyst in that Department should (if his certificate is in direct contradiction to

that of the Public Analyst) be called upon to attend at the adjourned hearing and explain in what manner he arrived at the result of his analysis, for it should be particularly borne in mind that such certificate is not final, although frequently taken to be.

SECTION 25.

Many have been the number of cases dismissed by persons in trade taking advantage of the protection given to them under this Section, but the greatest care should always be exercised by the Inspector in seeing that the Court accept only a proper written warranty. What constitutes a warranty has been now clearly laid down, and references have been made by me at the end of this paper to the decided cases. It is well, though, just to point out that a general contract to supply new milk is not a "written warranty" within the meaning of this section.

1179 ACT. SECTION 8.

Under this Section an Inspector has power to take the sample, but the wording of it is very vague as to what is to be done with the sample after it has been taken. Has the Inspector to deliver the whole of it to the Analyst to divide, as he would under Section 15 of the 1875 Act, or is the Inspector to divide it into three parts without offering to do so? I am of opinion that it is the Analyst's duty, and I would suggest that this Section might be usefully amended by a future Act, notwithstanding the decision of *Rouch v. Hall* (as to Sec. 14). As a certain gentleman in a lecture given the other day stated that the place where a sample ought to be taken was where the article was sent from, and not the place where it arrived, perhaps it would be as well to point out that that statement was entirely wrong, as the case of *Tilshie v. Evington* clearly decides that point. After giving in appendix form his observations on the duties of Inspectors, Mr. Tyler propounded the following questions:—1. Are the Adulteration Acts sufficiently stringent for the protection of the public? 2. If not, what provision should be made? 3. Are the new Bills sufficiently stringent? 4. As the Incorporated Society was asked to send representatives to the House of Lords to give evidence before a Select Committee on one Bill, cannot means be taken to approach all members of Parliament who introduce Bills which have relation to the different Acts we work under, with a view to evidence being given by Inspectors of the Incorporated Society, before any Committee appointed to consider them.

PLYMOUTH AND THE ADULTERATION ACTS.

The *Western Morning News*, August 17th, asks some very searching questions of the Sanitary Committee. Our contemporary says:—

"The Sanitary Committee are appointed to carry out very important duties, the neglect of which means discomfort to, and even injury to the lives of, the community. Amongst other duties, they are appointed, 'to execute the provisions of the Food and Drugs Act 1875, and the Acts amending the same.' It cannot be believed that in a large town like Plymouth all the food and drugs retailed are above reproach. To quote one instance, can it be denied that much coffee adulterated largely with chicory is sold as pure coffee? What is true of the adulteration of coffee is in other towns found to be the case with reference to other articles coming under the head of 'foods.' The report of the Borough Analyst for last year shows that during a comparatively short experience of six months in that position he was struck by the extent to which food is sophisticated in the town. The numerous successful prosecutions supported this view. Yet what has been the record of the past six months in the checking of adulteration? Except as regards milk, there have been no prosecutions under these Acts, so far as we are able to judge from official reports. Were the prosecutions during the second half of last year so successful, that in very fear of a continuance of this war against adulteration it was stopped? These Acts were meant to be strictly enforced, and it is discreditable that they should be allowed to be inoperative, and that purchasers, who after all pay for the maintenance of all the paraphernalia of the Analyst's department, should suffer. In justice to them, the reason for the sudden discontinuance of the prosecutions, after the appointment of a Public Analyst and the fitting up at a considerable outlay of a laboratory, should be stated by the Sanitary Committee, whose duty it is to see that the Acts are enforced."

COFFEE.

Henry Wilkinson, grocer, 5, Steelhouse-lane, was charged at Wolverhampton on August 17th, with selling adulterated coffee.—Mr. G. F. Allwood stated that as Inspector under the Food and Drugs Act he caused a quarter of a pound of coffee to be purchased from the defendant's shop, and on being submitted for analysis it was found to contain 67 per cent. of chicory. Defendant was fined 20s. and costs—total £2 4s. 6d.

WEST SUFFOLK COUNTY COUNCIL.

THE LOCAL GOVERNMENT BOARD COMPLAIN OF THE BURKING OF THE ADULTERATION ACTS.

This Council met on August 14th, at Bury St. Edmunds; Colonel Barnardiston presiding. The General Purposes Committee reported that a letter had been received from the Local Government Board, regretting that no samples had been submitted for analysis to the County Analyst under the Food and Drugs Act. The committee recommended that a letter be sent to the Chief Constable, with the suggestion that the Superintendents of Police be instructed to carry out the provisions of the Act. Sir Robert Affleck, following on the action taken by the East Suffolk Standing Joint Committee, moved:—"That as in the opinion of this Council it is practically impossible for the police to obtain samples for analysis, in accordance with the Food and Drugs Act, the Clerk write to the Local Government Board for information." After discussion, Sir R. Affleck withdrew his motion, and the report was adopted.

TO MANUFACTURERS OF FOOD STUFFS.

Do you manufacture a first-class genuine article of food? If you do, then *FOOD & SANITATION* is the journal in which to advertise it. An eminent Medical man writes—"I think it would be a good thing if honest tradesmen knew that Medical men make a great point in strongly recommending all kinds of food articles that are advertised in *FOOD AND SANITATION*. We take the presence of the advertisement in your journal as a guarantee that the foods are what they profess to be."

As a medium for High-Class Advertisements *FOOD AND SANITATION* is unequalled, having a larger *bona fide* Subscription List than the whole of the Grocery Trade Journals and Sanitary Journals combined. Terms for advertisements may be had by writing to the

LONDON PRESS EXCHANGE, LIMITED.

183, Strand, London, W.C.

WHAT OUR READERS SAY.

To the EDITOR OF *FOOD AND SANITATION*.

DEAR SIR,—In forwarding my yearly subscription I wish your paper every success, as one of the most instructive ever placed in the hands of any Sanitary Officer.—I am, &c.,

Town Hall, St. Martin's-in-the-Fields,

WM. COOK.

Charing Cross, August 21st, 1893.

To the EDITOR OF *FOOD AND SANITATION*.

SIR,—If I might make a suggestion, I would like to say that whilst the contents of your paper are in every way excellent yet your title is hardly one that conveys to the trade the objects and scope of your journal. Fortunately, I early learnt of your paper from an ardent well-wisher, the head of the Medical profession in England. It has been an education to me, old stager as I am, in regard to the food question. I think, as your journal has for its objects the suppression of adulteration, the protection of honest tradesmen, and the giving of fair play to English industries, you should call your paper by a more appropriate title.

—Yours, &c.,

A WHOLESALE TRADER.

A WIDE-AWAKE GROCER says:—"I followed your advice re Acetic Acid. Neighbours of mine were fined heavily—one of them £20—for selling Acetic Acid as Vinegar. I was unaware of the swindle until your journal opened my eyes to it. The same with beef stearine in lard and excess water in butter. I reckoned the other day what your journal has saved me to be at least £25, not to speak of reputation, for the Inspectors in my district are very energetic, and this is the amount one of my fellow tradesmen has lost in fines and costs. My 6s. 6d. subscription to *Food and Sanitation* has been a good investment."

SICILIAN WINE VINEGAR,

GUARANTEED ABSOLUTELY PURE.

The purest of Vinegars; guaranteed to stand any Analytical test; pure from start to finish; needing no distillation, but a natural unsophisticated product, ensuring perfect digestion not possible in the various manufactured Acetic Compounds.

To be obtained of all the principal Grocery Establishments and Stores.

Write for Samples and Prices to

READ & DIGHT, Sole Proprietors, 72, Mark Lane, London, E.C.

R. & N. POTT, ESTABLISHED 1641, over 250 Years.
68, Sumner St., Southwark, LONDON, S.E.
GUARANTEE THEIR VINEGAR ABSOLUTELY Pure.

And FREE from the ADDITION of PYROLIGNEOUS or any other ACIDS. See Label on Casks & Bottles guaranteeing PURITY

Chafed Skin, Piles, Scalds, Chilblains, Chapped Hands, Neuralgic and Rheumatic Pains, Sore Eyes, Ear-ache, Cuts, Sunburn, Insect Bites or Stings, Throat Colds, and Skin Ailments quickly relieved by use of

CALVERT'S CARBOLIC OINTMENT,

Large Pots, 13½d. each, with full Instructions.

Court Circular says: "We cannot too highly recommend Calvert's Ointment. It is the best general Ointment with which we are familiar, and ought to be a stock remedy in every household."

Private report from Limassol Cyprus: "I have never found anything to come up to it for neuralgic 'Rheumatic Pains.'"

Samples sent Free by Post on receipt of value.

F. C. CALVERT & CO., MANCHESTER.
Awarded 60 Gold and Silver Medals and Diplomas.

FOOD & SANITATION,

THE ANTI-ADULTERATION JOURNAL;

To Protect the Public from Adulterations of every kind.

A NEWSPAPER TO SUPPORT ENGLISH, IRISH,
SCOTCH AND WELSH INDUSTRIES,
AND TO SUPPRESS
FOREIGN FREE FRAUD IN ALL IMPORTED
ARTICLES.

A Journal for Manufacturers, Merchants,
Wholesale and Retail Traders, Grocers
and Provision Dealers, Dairy Farmers,
English and Irish Produce
Merchants and Bacon Curers,
Pure Beer Brewers, Dis-
tillers, Fruit Growers,
AND
Agriculturists.

PUBLISHED WEEKLY

BY

M. HENRY, at 183, STRAND, LONDON, W.C.

SUBSCRIPTION: PER ANNUM, POST FREE, 6s. 6d.

SATURDAY, SEPTEMBER 2nd, 1893.

HOW ENGLISH INDUSTRIES ARE RUINED.

We have before us, as we write, a batch of circulars which are eloquence itself as illustrations of the real causes that are squelching native industry after industry, that have driven 500,000 acres of barley land out of cultivation within the last ten years, and thrust thousands of English labourers from the land into our large towns. Even as we write we have the pitiable instance of the poor wood carver driven from his employment by foreign competition, taking his own life, beaten in the hopeless struggle for existence, having the will and the power to work, but—shameful truth—unable in the land that bore him to find any one to hire his labour. We shall be told by those who with a despairing sigh resign themselves to regard the supplanting of native products in our markets by foreigners as inevitable, that this cannot be helped. We thank Heaven that there are yet Englishmen left in England of more robust, manly, and patriotic sort than these *miserables*. It is our shame and assists our ruin as a nation, that in our Government departments, and in our House of Gabble, Englishmen with the brains and the will to work for their country's good may be numbered on the fingers of one hand, whilst the political humbug, the margarine as butter thief, the American bacon as Irish swindler, and the "guinea pig" may be reckoned by hundreds. Rt. Hon. and Honourables in whom the dry rot of ill-digested political economy has taken the place of healthy English thinking, who have no practical knowledge of trade, pooh, pooh matters of which they are profoundly ignorant, whilst the "Tite Barnacles" of our Board of Trade and Local Government Board ask but two things of their country—heavy salaries paid regularly, and to be let alone. We have a Board of Trade, costing England some

£74,000 per year, and under its very eyes swindles ruinous to English trade are practiced every hour. Can any trader in England point to one spontaneous act of the Board of Trade to give fair play to English manufacturers and suppress such frauds? If not, then for what are we paying the Rt. Hon. A. J. Mundella and a host of other useless, idle officials enormous salaries? We will be scrupulously fair to these gentry, and say nothing which we cannot prove. One of the circulars lying before is as follows:—

Dear Sir,

65 and 66, Basinghall-street,

August 24th.

We beg to inform you that we are appointed sole agents to one of the most important German manufacturers of "Essigsprit" (acetic acid), which is usually sold as malt vinegar. The same contains 13 per cent. acid, that is to say 8 per cent. more than the English malt vinegar; by adding 160 per cent. water, therefore, a good vinegar is produced quite equal to the English make.

We quote the acetic acid at present at £3.7.0 less 2 per cent. discount per 100 gallons, c. i. f. London, and should be happy to call on you at your convenience.—We are, dear Sir,

Yours truly,

EDLER & Co.

The substance here so temptingly offered to the cupidity of the grocer is not vinegar, as every one, save, perhaps, the idle *ignorami* of the Board of Trade knows. Our columns this week record prosecutions for the sale of acetic acid as vinegar, but of what avail are a few dozen prosecutions? The gentry who lure the grocer into the imposture of vending dilute acetic acid under the name of vinegar know well that in three-fourths of England the Adulteration Acts are a dead letter, that in those three-fourths of England margarine is sold as butter, acetic acid as vinegar, and that FREE FRAUD has an absolutely unchecked career. But what have the Board of Trade or the Local Government Board done to remedy this grave scandal? They have not stirred a finger nor given even one jot of encouragement to those who have striven to force into public attention these frauds upon English trades. Genuine vinegar requires malt and grain for its production, but for years acetic acid from Germany has been openly sold in casks and branded as "malt vinegar" under the very nose of the Board of Trade idlers, and English barley has not been wanted, whilst English vinegar brewers have had less and less work for Englishmen. It was left to us—a penny newspaper—to expose this fraud and its effect upon English trade, and we were even refused the scant assistance of information of any kind upon adulteration from the Local Government Board. We must charitably suppose for the all potent reason that they knew nothing of the question, and cared less. But what a comment is this upon the use of the Board of Trade, that the fake marking of acetic acid as malt vinegar should go on for years, swindling the public and ruining English barley-growing and English vinegar brewers, whilst the department drawing £74,000 per year from England for protecting English trade calmly watches the foreign fraud and takes no step to suppress it! How shameful also is it that we have not a scientist in the Inland Revenue laboratory capable of accurately analysing butter and other articles, and that every foreigner, knowing this, blends margarine often in as high proportions as 25 per cent., and sends it into this country as pure butter. By this and like fraudulent devices, the foreigner is able to undersell the English and Irish butter producer and drive him out of our markets. Of every trade the tale of rascality may similarly be told and proved irrefragably, but what do the Rt. Hon. Italian English Minister and his *confrères* care for these questions? Less even than they cared for the Railway Rates. When will English traders demand fair play for English industries? How much longer will they endure hide-bound official ignorance and Foreign Free Fraud?

THE BACON TRADE FRAUDS.

Our contemporary, *The Hull Daily News*, in an able article upon *Frauds on the Housekeeper*, supports our indictment of the idle Board of Trade as follows:—

"The housekeeper is the victim of many forms of fraud, and so is the shopkeeper, though the imposition on the latter is of a different quality and kind to that practised on the former. It is a melancholy truth that of fraud and of folly in this (the best of all possible worlds!) there is no end or no limit. Civilization (so-called) increases, and folly and fraud spring up and bear abundant blossom. There is one form of fraud (a wretched imposition on the patient house wife) which has lately been discussed with a great deal of energy in domestic and other circles. The 'bacon famine,' doubtless, has some connection with the 'bacon trade frauds' on which *Food and Sanitation* writes so indignantly and so eloquently, but the relation is not visible to the gullest outsider. It is assumed that the *Daily Mail* has some special and peculiar interest in this question, judging from the communication we have received, and it is true that some months ago we published an interview on the subject with one of Hull's leading bacon factors, with the result that we were able to throw very considerable light on the 'bacon famine' as it existed at that time. A new cry is now being raised. It is

urged and pleaded that 'colossal frauds' are perpetrated upon consumers in the matter of foods, and a 'demand' has been formulated in the following vigorous and vivacious terms:—

"That the idle nuisances who infest our Government offices and pocket enormous salaries from the public for doing no atom of any useful work under the canopy of heaven, should be compelled to do their duty in suppressing such frauds, and give fair play, amongst others, to English and Irish bacon growers and curers."

"It is easy to see where the fraud comes in. 'Lardy, innutritious and uneatable trash,' is sold as 'Prime Wiltshire' and as 'best Irish.' This is infamous, our contemporary thinks. The public is being robbed wholesale, because the Board of Trade will not do a plain and imperative duty. Native growers (that is, English and Irish bacon breeders) do not have fair play, because American and other sorts of 'prime Wiltshire and best Irish' are not what the poor consumer often thinks they are—in other words, because they are protected and forced on the market by fraud. That is the allegation, the complaint. Not every consumer knows that the difference between Irish and American bacon, and the cause of the superiority of the former, is *not* a matter of cure and out, but of breed and feed. The Americans have for years been trying to run the honest and wholesome pig of old Oireland out of the markets, and we admit that in this matter Pat has a serious, and abiding grievance. If the rivalry had been honest and the competition 'free,' consumers would reap much advantage. But the gravamen of the complaint now renewed is that the competition has not been 'free,' that it has not been honest, and that by means of fraud and imposition Irish and English bacon growers (also the English consuming public) have suffered grievously and unjustly. 'It is,' says the journal we have already referred to, 'the shameless crushing out of English and Irish industries by free fraud fostered by Government Departments' that compels indignation. The Adulteration and the Merchandise Marks Acts are not effectual. There are prosecutions under them, but do they overtake one-tenth of the adulteration resorted to? A little passage in the recent report of the Select Committee on the Marking of Meat, is a liberal education in itself. Southport has a population of 41,500, and there are 54 butchers who would on an average sell at least a carcase a-piece a week. But it was stated that only three English animals were killed during the week. The balance of the meat sold was—? FOOD AND SANITATION thinks that Mr. Mundella is dear at a silver sixpence a week, although he draws £2,000 per annum for filling the office of President of the Board of Trade. Denmark, in ten years, has increased its butter exports to us by sixty million pounds, and our own dairy-farming and pig-curing industries are withering 'under the twin curses of Government scientific ignoramuses, who pass margarine as genuine butter, and idle, useless officials who draw England's money and do not one atom of useful work for it.' When will this question of trade adulteration and fraud be vigorously and earnestly grappled with? We have got one or two useful Acts placed on the Statute Book, enacted especially and exclusively to extirpate fraud and to put down adulteration, but so far the evil has yet only been touched at the fringes."

POISONOUS COLOURINGS AND UNSOUND FRUIT FOR JAM.

The Western Mercury, August 14th, says:—

"A useful and a growing industry is threatened by the cupidity and the rascality of men who rush into a business and carry it on for the sole purpose of making big profits, regardless of all other considerations. The disclosures which are being made as to the mode in which some of the London jam factories are conducted are enough to set up a panic among users of an article of diet which has of late years reached an enormous consumption. FOOD AND SANITATION recently exposed the abominable practice of using poisonous colouring matter. It now calls attention to the fact that fruit of the filthiest and most dangerous character is being systematically made up. In one quarter, a Sanitary Inspector seized several tons of fruit in a revolting state, the bulk of it actually putrid, and all destined to find its way to the jam-pot through the medium of a single factory. A strange find was a quantity of plum stones, dirty, as if gathered in the streets. When it is known that 'plum jam' very often contains no plums, but is made of other materials, the discovery of a separate supply of plum stones is significant. It ought to be remembered that unsound fruit is one of the most dangerous of foods, and with such strong temptations as there are existing to use it, the Sanitary Inspectors, who do not regularly inspect factories and note the character of the fruit that is being converted into jam, neglect an important and necessary duty. Last summer one cargo of fruit from a cholera-stricken port was worked up into a cheap jam, and a portion of the fruit caused a death by cholera in Cambridgeshire. Truly there is often 'death in the pot' when it is least expected."

The Sportsman says!—

"'Jam Satis.' So far as 'the poor' are concerned this would be true if the truth came out. But it does not. Such delicacies as apricot and plum preserve go on adorning the breakfast and tea tables of the free Englishman, which—if he only knew, as the penny novelist says—would be consigned to the dustbin or used as 'top dressing' in the kitchen garden. That we blush to say is about all that a good deal of the jam in the London market is fit for. The story is a dark one. Our thorough-going contemporary, FOOD AND SANITATION, has dragged a few of the marrow-curdling details to the light of day. The public health officers apparently leave the

manufactories severely alone. It is a pity. The jam-makers are simply doing as they 'darn well please,' as the American said, with the none too robust digestions of the British public. It will hardly be believed, but the other day some jam was being made in North London out of three van-loads of tinned pineapples in a state of 'goneness' as complete as that of the tenant who 'shoots the moon,' while to add to the lusciousness of the compound a few tons of putrid onions, gooseberries, &c., were being added. This time, however, the 'raw material' was pounced upon. Another of the 'ways' of the jam manufacturer is to collect plum-stones in the streets and elsewhere and 'put them in.' We are surprised it was not all U. P. with the festive English jam-eater years ago."

The *Manchester Examiner* says:—

DEATH IN THE JAM JAR.

"There is a great deal of adulteration of articles of food by unscrupulous traders, in spite of the army of Inspectors and Analysts and the Food and Drugs Act. Clause 6 of that Act says that 'Nothing shall be added to any article of food or drug unless the added substance is required for the production or preparation thereof as an article of commerce.' According to FOOD AND SANITATION, there is an increasing use of artificial colouring in food-stuffs. Attention is specially directed to the employment of coal-tar dyes for the purpose of colouring jams that have been made from inferior fruit. Some of the colouring ingredients used for giving a more attractive appearance to food-stuffs are innocuous; but we need scarcely say that aniline dyes are poisonous, and if, as is stated, these dyes are largely used for the artificial colouring of various articles of food, most people will agree that they should be specifically prohibited by law. No one can reasonably object to the use of the harmless annatto for colouring butter; but the case is very different when we learn that sausages, potted meats, and brawn made of bad flesh, that much of the sugar confectionery which is so largely consumed by children, and that a considerable quantity of the jam that is sold in earthenware jars are coloured with these deadly dyes in order to ensure for the articles in question a reader sale than they would have if a fresh appearance were not given to them by their artificial colouring. No doubt these colours are in many cases used in such minute quantities as to be practically harmless, but this is no excuse for their employment. Whether the poisonous colours are used in large or small quantities, it cannot be urged that they are necessary in the production or preparation of articles of food. It is anything but reassuring to know that the traders who mix aniline dyes in their food-stuffs have no particular reason to fear prosecution under the Food and Drugs Act. The recent case at Swansea, which was dismissed because the Analyst did not state in his certificate what was the percentage of aniline dye in the sample of raspberry jam he had tested, was one which the authorities were justified in bringing forward. The Borough Analyst had certified that the jam was coloured with one of the coal tar dyes, and he expressed the opinion that 'the use of such colouring matter is highly objectionable and prejudicial to health.' But the Act requires that there must be specific particulars as to the quantity of foreign ingredients in an adulterated article, and as it is difficult, if not impossible, to give the percentage of the coal-tar dye in so small a sample as is usually supplied to a Public Analyst, it follows that if the Public are to be properly protected against them the law will have to be altered. The amount of fruit and pickling material, says FOOD AND SANITATION, that is rejected by firms of repute and purchased by inferior jam makers in London, would surprise any save those who watch the markets. We may safely assume that large quantities of this jam, made from unsound fruit, are attractively coloured by these poisonous dyes. Purchasers and consumers are thus exposed to double danger."

THE "SHEFFIELD DAILY TELEGRAPH" ON MR. MUNDELLA.

It is not in Sheffield alone that two opinions exist regarding the value of Mr. Mundella's services. Discussing frauds in the bacon trade, FOOD AND SANITATION remarks:—"Although the country bristles with frauds and offenders against the Merchandise Marks Acts, there were last year but six prosecutions—a miserable total of only six attempts to suppress robbery of the public, being the entire result of this enormous expenditure of public time and money. But for even these prosecutions not one atom of credit is due to the idle, useless department, for they were only entered upon after trade associations had brought the cases out and dried and prodded the department to stir itself." "Idle, useless department," and presided over by the Member for Brightside! This is severe indeed. But worse remains to be told. The writer is so far from satisfied with the services of the department, that he would cheerfully vote the reduction of the President's salary from £2,000 per annum to 6d! An under-estimate surely.

THE RUGBY RURAL SANITARY AUTHORITY AND MAGISTRATES.

At the last meeting the Inspector reported under the Food and Drugs Act that in accordance with instructions he had taken out a summons against the vendor of a certain sample of milk which he had submitted for analysis, and which had been found to be adulterated. The case came before the Magistrates in due course, and was dismissed. Considerable discussion took place upon this matter, some of the guardians expressing an opinion that it was no use the Authority attempting to take these matters up if the Magistrates were going to treat them in the way they did.

MR. WALTER TYLER'S SUGGESTIONS TO FOOD & DRUGS ACTS INSPECTORS.

Appendix A to Mr. Tyler's paper published last week says:—

1. Any Inspector of Weights and Measures, Medical Officer of Health, Inspector of Nuisances, or any Police Constable may be appointed for the purpose of carrying out the duties under the Food and Drugs Acts.

2. He must be furnished by the Local Authority appointing him with a copy of his appointment duly signed by the Clerk of such authority.

3. The Inspector must always have with him his copy appointment.

4. In order to properly and efficiently carry out his duties he must be provided with proper bottles, jars, tins, paper, string, wax, jug, long dipper and an official seal for the purpose of dividing and fastening up the samples.

5. The purchase must be of an article of food or a drug, on sale by retail—or wholesale—see recent case of *M'Hugh v. Hodder*—on any premises, or in any shop or stores, or in any street or open place of public resort. The quantity must only be that which the Inspector shall reasonably require for the purpose of analysis. The following quantities to be purchased are suggested as "reasonably requisite" (in the case of some of the articles usually selected): Milk 1 pint; bread 2 lbs; butter $\frac{1}{2}$ lb; coffee $\frac{1}{2}$ lb; mustard $\frac{1}{2}$ lb; wine 1 pint; beer 3 pints.

It is imperative that the purchase of the article be completed by paying for the article before telling the seller the purpose for which the article has been purchased.

After the article has been purchased by the Inspector or his assistant, the Inspector must give to the seller the official notice which is as follows:—"This article has been purchased for the purpose of being analysed by the Public Analyst, and if you wish you can have it divided into three parts." (It is advisable for safety's sake to always name the article to the seller). If the offer made by the Inspector to the seller to divide the article be accepted, the Officer must then and there divide the article into three parts, if possible in the presence of the seller. Care should be taken to see that the Public Analyst always has a full third part. Each of the samples must be properly fastened and sealed up so as to prevent the possibility of its being tampered with or (in the case of a perishable article) of the air getting to it. Each part of the sample must bear a label, upon which must be written clearly and distinctly the official reference and

THE MORE SIMPLE THE METHOD

of doing this the less likelihood there is for an Inspector to make a mistake. For instance in the Western District of Middlesex on each part of the sample after it is done up is placed a label upon which is written "W.M." and the number. The Inspector must then and there hand one of the parts of the sample to the seller, but should the seller leave whilst the division is taking place it is advisable for the Inspector to leave it at his business premises. The 2nd part must be submitted to the Public Analyst without any unnecessary delay. (In the case of milk, it should be delivered to the Analyst within 24 hours.) The 3rd part must be retained by the Inspector and kept in a place of perfect security, the exclusive control over which being with the Inspector. Should, however, the seller of the article decline or refuse (or not make any answer to say whether he wishes to have a portion of the article left with him, it is imperative on the Inspector's part to take the whole of the article purchased to the Public Analyst, whose duty it is to divide the sample into two parts

AND NOT THE INSPECTOR'S,

the Inspector leaving one part with the Public Analyst, and the other part bringing away with him. The Inspector must be careful to notice that the part handed to him by the Analyst is properly sealed and that the marking on the label agrees with the reference number in his note book. It is advisable for the Inspector to submit the sample to the Analyst himself, but should, however, the Analyst reside a long off, the Inspector may send it to the Analyst through the Post Office as a registered letter. The portion of the sample remaining in the custody of the Inspector must always be produced in Court.

In the case of a refusal to sell to any Inspector an article exposed for sale very great care must be taken to find out beforehand that it is exposed for sale and not being merely conveyed from one place to another. This refers more particularly to milk, but the difficulty is easily got over by either waiting until the Inspector sees the milkman serving another person or hears him cry out. It is advisable for the Inspector always to have with him a copy of the 17th section, so that in the event of the refusal of a person to sell an article to him he can show him not only his copy appointment but also a copy of the section of the Act of Parliament. The Inspector must be sure to always tender the marketable value of the article, otherwise he would have no case to take into Court in the event of a refusal. When the Inspector is going to take a sample under sec. 3 of the 1879 Act it is always advisable that he should first of all show his authority to the person in charge for the time being of the article. Also he should notify to the seller or his agent if present the reason why he is taking the sample, viz., "for the purpose of being analysed by the Public Analyst."

It has been clearly laid down by the decisions in the cases of *Stare v. Smith*, 45, J.P., 141, and *Horder v. Scott*, L.R., 5, Q.B.D., 552, that the Inspector is the proper person to take any necessary proceedings.

In all legal proceedings under both Acts it is advisable—but only

compulsory in the case of perishable articles)—that the summons to appear before the magistrates should be served 28 days, including the date of purchase, although in some instances a longer time is allowed; and, it is a very important matter indeed to point out to all Inspectors that the summons must be served seven clear days before it can be heard, so that if the case was set down for hearing on a Saturday, the summons must have been served not later than on the Friday week previously. The Public Analyst should be asked by Inspectors to return their certificates as soon as possible so that the Inspectors can have plenty of time to comply with the foregoing paragraph. Two forms of summons that are most commonly used are here set out. It would take up too much space to give forms of summons to meet every case, but should an Inspector wish for any particular one he can obtain it by applying to the Executive Council. Special care must always be taken by Inspectors to check all summonses before they are served upon defendants. All certificates should be carefully examined as to dates, &c., immediately they are received from the Public Analyst. The Inspector cannot be too careful with his note book. One case only should be entered on a page. The note made with reference to the case should be a full one, as he is entitled to read from it whilst in the witness box. Under no circumstances must the Inspector make known to the seller the result of the analysis of the article purchased (where no prosecution has taken place) unless he has received special directions from his authority to do so.

The Inspector must be careful to remember that the only certificate the Court can receive is that of the Public Analyst. The Inspector should most respectfully call the special attention of the Court to this point, and hand in the Act of Parliament. Too much stress cannot be placed upon this point, as it very frequently happens that the legal gentleman engaged for the defence tries to introduce another analyst's certificate.

When taking a sample under sec. 3 of the 1879 Act, the Inspector must first of all satisfy himself as to the bona fides of the contract or warranty, i.e.,

1. As to what quantity and quality.
2. The terms as to carriage.
3. To what railway station the article is to be delivered.

INDEX TO VOLUMES I. AND II.

We have to apologise to subscribers for the delay in sending this out. We hope to forward it with next week's copies of the Journal. Subscribers who have not yet ordered it should send the price, 1/-, to the Publisher at once to ensure getting a copy of the Index.

HOW OTHER COUNTRIES LEGISLATE FOR MARGARINE.

We are enabled, by the courtesy of an able American journal, *The National Provisioner*, to give our readers a further résumé of the legislation affecting the sale of margarine adopted by American States:—

Connecticut. The law of this state prescribes that no imitation butter shall be sold, unless there is a plain sign at the outer main entrance to the establishment bearing the words 'Sold Here,' preceded by the name of the imitation article. All oleomargarine must be kept in packages marked with the name of the contents, and the seller must orally inform each buyer the name of the imitation article. Any article resembling butter, and not made wholly from the milk of cows, is defined to be imitation butter.

Massachusetts. Section 1 of an Act approved March 10th, 1891, to take effect the first day of September, 1891, reads as follows:—

"No person, by himself, or his agents, or servants, shall render or manufacture, sell, or offer for sale, expose for sale, or have in his possession with intent to sell, any article, product or compound made wholly or partly out of any fat, oil or oleaginous substance or compound thereof, not produced unadulterated milk or cream from the same; provided that nothing in this Act shall be construed to prohibit the manufacture or sale of oleomargarine in a separate and distinct form, and in such manner as will advise the consumer of its real character, free from coloration or ingredient that causes it to look like butter."

"Another Act imposes penalties upon whoever sells or offers for sale to any person who asks, sends or enquires for butter any oleomargarine, butterine, or any substance made in imitation of pure butter. Where oleomargarine or butterine is served in hotels, restaurants or any lunch counter, guests or patrons thereof must be notified of the fact.

Michigan. An Act approved June 9th, 1887, prohibits the sale as butter or for butter any oleomargarine, butterine or other article or substance resembling butter not made exclusively from milk or cream. The Act also requires conspicuous notices to be posted up in hotels, restaurants and other similar places using imitation butter, and furnishing food to persons paying for the same. An Act approved April 29th, 1891, prohibits the use of oleomargarine, butterine or any other substitute for butter in any of the public institutions of the State.

Montana. Any article or compound not the exclusive product of the dairy is oleomargarine. Each package containing such substance must be marked 'Oleomargarine Butter.' Hotels, restaurants, boarding houses, etc., using oleomargarine, butterine, or any other butter substitutes, shall post up three notices in the English language and one in the German language conspicuously in the rooms where meals are served, bearing the true and common name of the substitute over the words 'Used here instead of butter.'

"**Minnesota.** An Act approved March 2nd, 1887, prohibits the sale or manufacture of oleomargarine or adulterated butter. It is also prohibited to have in possession oleomargarine, or other similar butter substitutes that have been coloured to resemble natural butter. An Act of April 21, 1891, to take effect from the date of its passage, provides against the sale, or having in possession, with intent to sell, any butter substitute that is of any other color than bright pink.

"**Mississippi.** An Act approved March 9th, 1882, provides that every person dealing in oleomargarine, or other similarly manufactured butter, must distinctly mark or brand the same 'Oleomargarine' or with whatever name it may be known by, and requires every dealer in the article to pay a privilege tax of 50 dollars.

"**Missouri.** The law requires that the name of any substance made in imitation of butter shall be clearly and indelibly branded, marked or labelled upon the packages. [Hotels, Boarding houses, etc., serving oleomargarine, must clearly and legibly mark the vessel in which such compound is served with the words 'Oleomargarine' or 'Impure Butter.'

"**Nevada.** All packages containing any article in semblance of natural butter, manufactured or offered for sale, and which is not made exclusively from milk or cream, must bear the word 'Oleomargarine' distinctly branded or marked thereon.

"**New Jersey.** An Act of March 22nd, 1886, provides against the sale of oleomargarine or any substance in semblance of natural butter, except when the tubs, pails, boxes, firkins, vessels, or other packages containing the same, are marked or labelled with the words 'Oleomargarine,' 'Imitation Butter,' &c., and have painted thereon a black stripe, at least three inches wide, midway between the top and bottom and completely encircling the package. An Act, supplemental to the above, approved April 21st, 1887, prohibits the sale or having in possession for purposes of sale of oleomargarine, butterine, etc., containing any colouring matter whatever, and requires retail dealers selling less than the original package to furnish the purchaser with a printed card or notice of the nature of the substance.

"**Nebraska.** An Act which took effect February 24th, 1883, provides that any article in semblance of natural butter that is not made exclusively from milk or cream shall be distinctly and durably branded, stamped or marked 'Oleomargarine' or 'Butterine.' Retailers must deliver with each parcel a label bearing the words 'Oleomargarine' or 'Butterine.'

"**New Hampshire.** A law of August 26th, 1885, provides against the sale of butter substitutes unless they are coloured pink. This requirement renders the law practically prohibitory."

Mr. Maclure, M.P., is busy opposing the Hon. Horace Plunkett's Bill to repress margarine swindles, and has blocked that measure in the interests of sundry enemies of English and Irish Agriculture. We think Mr. Maclure's company record, directorial and otherwise, would be of interest and advantage to the public, and may explain his present attitude. Readers of our journal may be able to send us some particulars? If so the Editor will be pleased to receive them.

THE SANITARY INSPECTORS FORMULATE A POLICY.

The Sanitary Inspectors, at their conference in Glasgow, passed the following resolutions:—

- (1) That all Officers now variously named Sanitary Inspectors and Inspectors of Nuisances be designated Sanitary Inspectors.
- (2) That every accepted candidate for the position of Sanitary Inspector within the United Kingdom shall possess a certificate of competency in sanitary law and practice, such certificate to be granted only by examiners appointed by Government.
- (3) That the Sanitary Inspectors of England shall be elected to permanent tenure of office, and shall only be dismissable for misconduct or proved incompetence, with right of appeal to the Local Government Board, as is now provided for Scottish Inspectors, under the Local Government (Scotland) Act, 1889.
- (4) That in reference to the Public Health Acts of England it shall be the duty of Sanitary Inspectors to inspect the districts to which they are appointed, to receive complaints of nuisances and serve notices forthwith requiring all necessary works to be done for the abatement of nuisances, such notices to be as valid, if confirmed by the local authority, as if served by the authority's order.
- (5) That Sanitary Inspectors shall be required to give their whole time to the duties laid upon them by their local authority, and that an adequate minimum salary be prescribed.
- (6) That the Superannuation Allowances Act, 1166, 29 Vic., cap. 31, which applies to the metropolis only, be extended to include the Officers of all urban and rural Sanitary Authorities within the United Kingdom, and that the said Act be amended, giving thereby to all Officers a legal claim to superannuation.

IF YOU SELL A GENUINE ARTICLE

LET THE PUBLIC AND THE TRADE KNOW IT.
ADVERTISE IT IN "FOOD AND SANITATION."

Retail Traders study FOOD AND SANITATION to know what Food Stuffs they can sell without risk of prosecution.

The Grocer who does not subscribe to FOOD AND SANITATION places himself, at the mercy of unscrupulous wholesale dealers. FOOD AND SANITATION costs only 6s. 6d. yearly, post free, and has saved its readers from many prosecutions. Send on your 6s. 6d. at once, and begin with the New Volume.

Subscribers should address, PUBLISHER,

"FOOD AND SANITATION," 183, Strand, London, W.C.

VINEGAR.

THE BIRMINGHAM VINEGAR COMPANY'S PRODUCTION.

At Shire Hall, Nottingham, on Aug. 26, before Mr. J. L. Franklin, Mr. W. Wright and Major Robinson, W. Bacon, Grocer, Beeston, was summoned by Mr. W. Crabtree, Food and Drugs Inspector, for selling adulterated vinegar on the 17th July last. Mr. E. Bottrill appeared for the prosecution, and Mr. Hugo Young (instructed by Mr. Tanner, of Birmingham) defended. A pint of vinegar was purchased at the defendant's shop for the purpose of analysis. A sample was sent to the Public Analyst, Mr. Otto Hehner, who certified that it was adulterated malt vinegar, there being not more than 10 per cent. of real malt vinegar to 90 per cent. of acetic acid. The vinegar had been purchased from the Birmingham Vinegar Brewery Company, but the defendant admitted that he also purchased from another firm. He was positive that the two were not mixed. The analysis made by the Public Analyst differed from the analysis made from the sample submitted to the company's Analyst, and the samples on being produced in court differed in appearance. The test of the quality of the vinegar turned upon the presence of a certain quantity of acid in it, and it was submitted that vinegar was much better for the infinitesimal presence of that acid. If the acid could be got rid of altogether its keeping properties would be improved. The Public Analyst maintained that although the absence of the acid would be of no particular loss to the purchaser, nevertheless, its absence deprived the vinegar of an important characteristic, obtainable in no other way than by brewing it with a certain proportion of malt. The Chairman, after consultation with his colleagues, said the Bench had given the case their serious consideration, and had decided to convict the defendant, and fine him £3 3s. for selling a material that was not a genuine vinegar. He also thought it right to state that the Bench had every confidence in the *bonâ fides* of the Birmingham Vinegar Brewing Company. Mr. Tanner said that as it was probable the decision of the Bench would be appealed against at Quarter Sessions, he had to apply that three samples analysed be taken care of by the officers of the Court. The Chairman gave instructions to Deputy-Chief Constable Hallam to take care of the bottles, and said he understood Mr. Tanner desired to clear the Birmingham Vinegar Company, and said his *locus standi* was in connection with the defendant, but of course, the company was interested.

Upon the question of the sale of PYROLIGNEOUS ACETIC ACID as vinegar, and its possible effect in causing TINNED MEAT POISONINGS so prevalent of late, a correspondent writes:—

Sir,—Last March and April persons were convicted for selling pyroligneous acetic acid as vinegar. How is it that acetic acid is still being largely sold? Pathologists state, when anything not containing peptones is introduced into the stomach it refuses, or is unable to secrete, pepsin. Does this help to explain poisoning by tinned salmon? Salmon requires pepsin to digest it. Pyroligneous acetic acid from its mode of manufacture cannot contain peptones, and therefore stops the formation of pepsin, so leading to decomposition of the fish in the stomach and the formation of ptomaines. All malt liquors, including vinegars, are rich in peptones. I think this is a question so vital that it should not be allowed to pass without strictest investigation by all health authorities. Perhaps the cucumber is blamed when it should be the acetic acid. The farce of appeal against the convictions I need not go into. I am not interested in the sale or make of vinegar in any way, only writing *pro bono publico*.
S. A. COLLIS.

IMPORTANT CASE AT SWANSEA.

At the Swansea Police-court, on August 26th, before Colonel Wright (in the chair), Mr. W. Williams, M.P., Dr. J. G. Hall, Messrs. W. Richards, Thomas Freeman, and Daniel Edwards, sitting as County Petty Sessional Magistrates, the summons was brought against Elizabeth Lodwick, a grocer, of Gowerston, and the text of the summons was, that the defendant did unlawfully sell to the said James Thomas a certain article of food and drink, to wit, vinegar, which was not of the substance, nature and quality of the article demanded; that is to say, that such vinegar contained the parts or percentage of foreign ingredients, as follows:—Genuine vinegar 20 per cent., and diluted pyroligneous acid 80 per cent. Mr. Herbert Monger appeared for the prosecution, and Mr. Nicholson (Cardiff) defended. In opening the case, Mr. Monger said that pyroligneous acid was produced not in the usual and proper way in which genuine vinegar is made, but is produced from a kind of distillation of wood. This practice of obtaining a fluid which had been sold as vinegar had been carried on for some time past. Latterly, however, the matter had engaged the attention of the public authorities in different parts of the country, and had been taken into the courts of law, particularly at Birmingham, where the matter was fought out on appeal in all its details. He, therefore, awaited with interest to see if the defendant in the present case took up any different position to that taken up before the Birmingham authorities. It was there contended that because the fluid had been used for many years as vinegar, that, therefore, long usage had established it as the genuine article. That contention was met, however, that though it might have been used for a long time, it was unknowingly done; in fact, the composition of this article had only recently been thoroughly understood. Superintendent Thomas (Neath) acting as one of the County Inspectors appointed under the Food and Drugs Act, was then called. He deposed to the purchase. When he went to the defendant's shop he asked for a pint of vinegar. Defendant gave it him, and witness paid 1jd. for it. He then divided it in the usual way, and told the defendant that he was going to submit one of the three samples to Dr. W. Morgan, the Public Analyst. Cross-examined by Mr. Nicholson: Witness did not know that he made a raid upon the shop

because he also purchased a quantity of lard for the purpose of analysis. Technically he did not know the composition of vinegar, but knew it was an acid. Dr. W. Morgan gave evidence in support of his certificate. The eighty per cent. pyroligneous acid contained in the fluid was certainly not vinegar. Cross-examined by Mr. Nicholson: Pure vinegar was the product of fermented malt or grain, or, technically, acetous fermentation of alcohol. The acetification was produced by oxidation in the process of the manufacture of vinegar. Then the presence of acetic acid in vinegar was essentially true? Certainly, with its accompaniments which are produced from malt or grain. What is the distinction between acetic acid and pyroligneous acid?—Pyroligneous acid is obtained from the dried distillation of wood, and among other things it contains acetic acid, which is the active principle. May I take it pyroligneous acid is an impure form of acetic acid? Yes, it is acetic acid with impurities. Now, assuming in the same liquid you had acetic and pyroligneous acid, how would you separate them? By distillation. By what chemical process do you distinguish between acetic acid? Well, the absence of phosphoric acid and phosphates would be found if produced from malt or grain. Did you find phosphates in the sample you tested? Yes, just sufficient to indicate that there was genuine vinegar. What was the percentage of phosphates? I found .09 per cent. instead of .5 at the very least. Dr. Morgan then proceeded to state the tests he had made. He found the specific gravity of the sample to be 1.022. The Chairman: What is the specific gravity of vinegar? Witness replied that it varied, whilst if burnt sugar was added, the specific gravity could be increased to what extent they liked. Therefore, he did not rely upon the specific gravity test, for though a low specific gravity would indicate the presence of pyroligneous acid, yet by the addition of burnt sugar the specific gravity could be increased. Continuing, witness said that acetic acid prepared by fermentation for that obtained by the distillation of wood, were the same if considered chemically. Do you consider acetic acid or pyroligneous acid injurious to health? I do not think it is a fair question. For example I could not say that water in milk is injurious to health. I do say if it is sold as vinegar, it is to the prejudice of the purchaser. In defence, Mr. Nicholson said that it was a puzzle to chemical science to define vinegar, and they consequently had recourse to the *British Pharmacopœia*, which defined vinegar as "an acid liquid prepared from a mixture of malted and unmalted grain by acetous fermentation." The only difference between acetic acid and pyroligneous acid, to take the extreme view, was that the latter was slightly adulterated with extraneous matter. In the event of the expert evidence which he was about to call being conflicting with Dr. Morgan's evidence, he should ask to be allowed to avail himself of the section of the Act which enabled the Bench to transmit the sample to Somerset House, and on the result of that analysis he would stand or fall. The four points he should submit were (1) that there was no impure acetic acid or pyroligneous acid in the sample (2), that the pure acetic acid in the substance was of the quality suggested by the *British Pharmacopœia*, (3) that pure acetic acid was an essential part of vinegar, and is, in matter and in fact, generated in the process of its manufacture, and (4) that the sample is not injurious to health. The defendant (Mrs. Lodwick), Mr. Samuel Chivers of the firm of Messrs. S. Chivers and Company, Cardiff, the manufacturers of the vinegar in question, Mr. Milton Beene, foreman brewer in the employ of this firm, where then placed in the box, the two latter witnesses deposing to the manner in which the vinegar was prepared. Mr. Chivers admitted, in re-examination, that pyroligneous acid was commonly used in making the vinegar. Mr. Frederick Davies, a medical man at the London University, gave evidence of having made an analysis of a sample of the fluid. He found it contained 4.27 per cent. of real acetic acid, but no pyroligneous acid, inasmuch as this acid was practically pure acetic acid. The sample was a thoroughly sound quality of vinegar. Cross-examined by Mr. Monger: Mr. Chiver's submitted witness's sample, and not the defendant's. Witness was then severely questioned by Mr. Monger as to the methods he adopted in his tests, and ultimately the Chairman announced that the Bench had come to the conclusion that the so-called vinegar was not a vinegar according to the Act of Parliament taking the evidence all round. Defendant would, therefore, be fined 1s. and costs, amounting to £2 18s. in all. Mr. Nicholson applied for permission to state a case. The Chairman: Oh, yes, certainly. Replying to the Magistrates' Clerk (Mr. Jenkin Jones), Mr. Nicholson submitted that the point of law on which he asked for the case to be stated was that vinegar was asked for and vinegar was obtained. The Magistrates' Clerk: That is no point of law. If you cannot get a better point than that the Magistrates will probably decline to state a case. Mr. Nicholson: Do I take it, then, that you refuse? The Magistrates' Clerk: Oh, no; but whenever you submit a point of law, I will submit it to the Bench to consider. Mr. Nicholson: Very well. The Court then rose.

At the Leicester Police-court, on August 29th, Joseph Harrison, farmer, of Pailton Pastures, was charged on two informations with selling adulterated milk to the Farmers' Milk Supply and General Produce Company, Limited, on the 15th August. He pleaded not guilty. The Town Clerk (Mr. J. Storey), who prosecuted, stated that two cans of milk were sent to Leicester by defendant in pursuance of a contract with the dairy company. They were met at the railway station by an Inspector, and samples were taken and sent to the Analyst, who certified that one contained 10 and the other 11 per cent. of added water. Evidence was called in support of the Town Clerk's statement. Defendant said he did not know the milk was adulterated. He could not be always there to look after it. Defendant was fined £5 in each case.

SODA WATER.

At the Derby Borough Police-court, on August 23rd, Jas. McLachlan, of the Grapes Inn, Derby, was summoned for selling four bottles of soda water which were not of the nature, substance, and quality of the article demanded by the purchaser, Mr. William Wilkinson, Sanitary Inspector, the soda water being carbonated or aerated water, and not being real soda water. The Town Clerk pointed out that there were several waters manufactured, and carbonic acid gas was common to all of them. The difference was that to soda water a solution of bi-carbonate of soda was added, to potash a solution of potash, and so on. It was something like British spirits, which were all made out of the same barrel, but flavoured differently. In the present case there was absolutely no soda in the water at all. Mr. Wilkinson stated that upon each of the bottles was the impressed label, "Pountain, Girardot, and Forman." The defendant said he was in a tied house, and was obliged to take what was supplied to him or leave. He was fined 10s. and costs—£1 10s. 6d. in all.

WHISKY.

At Lindsey Petty Sessions, held at Lincoln on August 18th, Herbert Brooks, licensed victualler, of Loughterton, was summoned under the Food and Drugs Act, for selling whisky to P.C. Patchett, at Loughterton, on the 18th July. It appeared from the analysis that the spirit was 15 degrees below the standard at which it could legally be sold. Mr. Brooks said he had kept the house 28 years without a complaint. His wife must have made a mistake. Fined 10s., and 4s. 6d. costs.

At Wakefield, on August 18th, Stephen Askew, innkeeper, Agbrigg, was charged with selling whisky which was not of the required strength. Mr. Talbot Kyle, Inspector under the Food and Drugs Act, prosecuted on behalf of the County Council, and said that on the 6th of July he went to the defendant's shop and purchased half-a-pint of Irish whisky from Mrs. Askew, for which he paid 1s. 2d. and which on analysis was found to contain 14.3 parts excess of water. Mr. Kyle produced a certificate of Mr. A. H. Allen, Public Analyst, which showed that it was diluted to the extent of 35.7 deg., and that the limit under the Act was 25 deg. The Bench fined defendant £2 5s. 10d., including costs, or one month.

At Wells County Police-court, on August 14th, before Major the Hon. E. J. Boyle, in the chair, and Mr. A. F. Somerville, Henry John Salisbury, landlord of the Coxley Pound Inn, was summoned for selling whisky adulterated with water. P.C. Clark bought a pint of whisky on July 11, which, on being submitted to the County Analyst, was 40.2 under proof. The defence put forward by Mr. Roach, who defended, was that the wife added water to the whisky not having known that her husband had previously done so. Fined 10s. and costs.

At Skipton Police-court, on August 12th, Joseph Ramsden, landlord of the Cavendish Arms, Embsay, was summoned on information taken out by Mr. Randerson, Inspector under the Food and Drugs Act, for having in his possession for sale Scotch and Irish whisky containing more than the regulated amount of water. The Inspector visited the Cavendish Arms, Embsay, on the 3rd ult., and purchased quantities of Scotch and Irish whisky. He forwarded samples to the County Analyst, and his certificate forwarded on the 29th ult. stated that the Scotch whisky contained 8.5 degrees excess of water. The Irish whisky contained 8.2 degrees excess of water than allowed by Act of Parliament. The defendant pleaded in extenuation of the offence, that being new to the business he did not understand the proper quantities of water to be added to spirits. The Chairman said when the defendant purchased spirits from the wholesale manufacturers he would expect them to be right, and the public expected the same. A fine of 10s. and costs was imposed for each of the two offences.

At the Skipton West Riding Police-court, on Saturday, August 26th, before G. T. Coulthurst, Esq., T. H. Dewhurst, Esq., Colonel Robinson and others, William Turpin Chippendale, innkeeper, of Embsay, was summoned for selling to the prejudice of Inspector A. Randerson, on July 3rd, one pint of Scotch whisky which was diluted with water 31.9 degrees under proof, and one pint of Irish whisky 30 degrees under proof. Fined 20s. and costs in each case, in all £4 9s. 11d.

BEER.

Harry William Dawson, of 2, Burnand-place, was summoned on August 25th, at the Clerkenwell Police-court, for diluting beer to the extent of three gallons of water to a barrel of 36 gallons. Mr. Squire prosecuted on behalf of the Inland Revenue, and Mr. Ford defended the accused. Samples of ale were taken from two barrels at the defendant's premises on the 24th June. One of the samples proved to have been diluted to the extent above referred to. The defence was that the potman was "tapping" the barrel, when he was suddenly called from the cellar to the bar. When he returned to the cellar, he found that some liquor had escaped from the tap—he had not driven the tap in far enough. In order to make up for the escape, he filled up the barrel with water. The potman was called, and gave evidence in support of the defence. He said he had only given the tap four taps with the mallet, when he was called into the bar. On his return, finding some ale had escaped owing to the tap being loose, he filled the barrel up with water. Mr. Rose suggested in future that the potman should remain in the cellar half a minute longer while he gave the requisite fifth blow on the tap with the mallet. Defendant would be fined £3, and 2s. costs.

BRANDY.

At Oundle Petty Sessions, on August 24th, Henry Wells, Oundle, landlord of the Half Moon Inn, was charged under the Food and Drugs Act with selling adulterated brandy on 19th ult. Mr. Clowes, Inspector of Weights and Measures, said he instructed his assistant, Mr. Joseph Malkin, to call at defendant's and purchase one pint of brandy, for which he gave him 4s. Witness met his assistant at the door of the Half Moon, when he gave him the brandy and 2d. change. They returned to the house, and told defendant's daughter, who was in the bar, that the brandy was purchased for the Public Analyst. He divided the brandy into three parts, and left one with them (to which defendant's wife and daughter assented). The other part he took to the County Analyst at Leicester, and the other, now produced, he sealed. He sealed all three samples up in the presence of those named. The Analyst's certificate now produced, shewed it to be 30 per cent. under proof. He did not see any notice displayed stating that liquors sold there were adulterated. Cross-examined by defendant: Perhaps it would have been more convenient to have gone in first and told them what the article was wanted for, but he did not consider that fair to the public. Mr. Malkin corroborated. The Inspector re-called said he purchased of three other licensed victuallers in Oundle the same day. They were correct. Twenty-five per cent. was the allowance for brandy. The defendant said he had been in the house for 37 years. He was 74 years old, and left the business to his daughter, and he must submit to the ruling of the Bench. The Chairman said they considered the long time defendant had held a licence and no complaint against him, and therefore took a lenient view of the case. Fined 20s. and 11s. 8d. costs.

RUM.

At Leicester, on August 22nd, Noah Hall, licensed victualler, Albert Hotel, Humberstone-road, was summoned for selling adulterated rum on the 27th July. The Town Clerk (Mr. J. Storey) appeared to prosecute, and Mr. T. B. Neale pleaded guilty on behalf of the defendant. It appeared that the rum was 4.2 degrees below proof, and Mr. Neale said that the spirit had evaporated. Defendant had kept the house for 20 years, and this was the first time he had been proceeded against. The Magistrates imposed a fine of two guineas, including costs, or seven days.

COFFEE.

At Clay Cross Petty Sessions, on August 23rd, Mary Brailsford, of Danesmoor, was charged under the Food and Drugs Act, by Col. Shortt for selling coffee not of the nature demanded by the purchaser, and fined 12s. 6d., including costs. Timothy Smith, grocer, New-street, Clay Cross, for a similar offence, was fined 12s. 6d., including costs.

At Eckington, on August 14th, Oliver Hibbard, grocer, Barlboro', was summoned for selling coffee from his shop which was adulterated with 60 per cent. of chicory, contrary to sec. 6 of the Food and Drugs Act. Mr. Marples, assistant to Col. Shortt, proved purchasing 3oz. of coffee from the defendant's shop, on the 6th June. Nothing was said to the effect that what was sold was a mixture. Col. Shortt said he also purchased a sample of coffee, which was adulterated. The girl who served him did not appear to understand the business, and had not been long in the shop, and under the circumstances he did not press for a penalty. Defendant had to pay the costs.

At Eckington Sessions, on August 14th, Jno. Stevenson, Ridgeway, was summoned for selling coffee which was adulterated with 50 per cent. of chicory. Mr. Marples proved purchasing the coffee, and Col. Shortt gave evidence as to the analysis of the coffee. There was nothing on the label to show that the coffee was a mixture, this information being contained on a part of the wrapper which was not exposed. Defendant said he sold the coffee as he bought it and as a mixture. He had the costs to pay.

Timothy Smith, grocer, of New-street, Clay Cross, for a similar offence, was fined 12s. 6d., including costs.

UN SOUND FOOD.

At Forfar, on August 15th, before Provost Doig and Bailie M'Dougal, Mr. Sterling, the Sanitary Inspector for the Burgh of Forfar, stated that on 14th August, within the shambles in No. 6 killing booth, then occupied by Andrew Lamond, cattle-dealer, Glamis-road, Forfar, he seized the carcass of a cattle beast, which there was probable cause for believing was intended for human food, and which appeared to him to be unfit for such food. Dr. Murray, Medical Officer of Health for the Burgh of Forfar, stated that he examined the carcass on Monday, and found it to be tainted with tuberculosis, the whole carcass being affected to a certain extent. George Lindsay, cattle-dealer, Forfar, appeared on Lamond's behalf, and said that the beast was suffering before it was sold from what Lamond thought was a broken back, and said it was bought at a place near Fearn. William Christie, Shambles-keeper, stated that the animal was brought to the Shambles about four o'clock, and when it was killed it was seen that it was affected all over with tuberculosis. Mr. Stirling moved for an order to grant the burying of the carcass. The order was granted.

At the Warrington Borough Police-court, on August 17th, James and Mary Marr, of St. Helens, were charged with exposing a quantity of hake in the Warrington Market, the same being unfit for food. Mr. J. Lyon Whittle (Town Clerk) prosecuted, and Mr. Riley, from St. Helens, defended. Mr. Powell said he visited the market

at twenty minutes past eight on August 4. He found the female defendant in charge of several boxes of fish. One of the boxes, containing codfish, had been opened and some of the fish sold. There were three boxes of hake, one of them open. Thinking the hake unfit for sale he had them seized. Dr. Peacock examined the fish and they were afterwards destroyed. By Mr. Riley. All the fish that he (the Inspector) saw sold were good. It was not extra hot on that day. Dr. Peacock said he examined the fish. They were all in an advanced stage of decomposition. Mr. Riley, for the defence, pointed out that only one of the boxes of hake had been opened, and out of this none had been sold. The boxes had travelled from Milford Haven that night and had not been in the market many seconds before the Inspector seized them. The fish did not belong to Marr; he sold them on commission. He called evidence in support of his statement, after which, the Chairman (Captain Ridgway) said the bench appreciated the vigilance of the Officer. They were also of opinion that Mr. Marr conducted his business in a straightforward manner. Under the circumstances they would dismiss the case, but Mr. Marr must be more careful as to what fish he sent to Warrington. There had been a quantity of bad fish hawked in Warrington, and he had been told that it had been traced to St. Helens.

At Southampton Borough Police-court, Lucy Rowe, of Canal-walk, was summoned by Chief Inspector Mr. Amor for exposing for sale eleven rabbits, which was unfit for the food of man on August 10. The animals were afterwards condemned by Mr. John Miller, J.P. For the defence Mr. W. H. Swayne appeared, and a plea of guilty was entered. Mr. Keele (on behalf of the Town Clerk) appeared for the prosecution. It was urged by Mr. Swayne the business was conducted by defendants' sister, that the rabbits were not exposed for sale, that they had only been brought in from the country the same day, and that owing to the exceptionally peculiar atmospheric conditions they turned bad very rapidly. Mr. Amor, in answer to the Magistrates, said the rabbits when he saw them were on a rod outside the shop. Information was given by P.s. Smith. The sergeant made a statement as to what he saw and did. The Chairman said the public must be protected, but they did not wish to press hardly on the defendant. She must pay 1s. penalty for each rabbit, and the costs, 17s. 6d. in all, or suffer 14 days' imprisonment.

At Musselburgh Police-court, on August 17th, John Lawrie and James Lawrie, butchers and cattle dealers, Pinkie-road, Musselburgh, were charged with having on the 6th August, had in their premises the carcass of a cow, which was diseased and unfit for human food. Mr. Paterson, burgh surveyor, said he got information that the carcass of the cow was hanging in Messrs. Lawrie's shed, and judging by the appearance it presented, he thought he was justified in seizing it. He called in Dr. Craigie and Mr. Mitchell to inspect it. The former expressed himself as doubtful, but the latter saw nothing wrong with the carcass. Mr. John Lawrie said he intended to send it to the market. Asked if he knew who the owner was, witness said he had his own idea of who the animal belonged to. He did not see Mr. James Lawrie about the premises at any time. Mr. John Gowan said the carcass had a bad appearance, and he would not have allowed it to pass without examination by a professional man had it been taken to the slaughter house. He destroyed the carcass. Dr. Craigie said the right and left hind-quarters were very black, but there was no evidence of tuberculosis when he examined it. The lungs were slightly congested. The blood was in a septic condition and the udder was diseased. Professor Williams said the carcass was not fit for human consumption. He found that the left hind quarter was diseased, and that the lungs were also in a diseased condition. The udder or milk gland was very much diseased. John Simpson, in the employment of ex-Bailie Lowe, said he killed the cow by Mr. Lowe's order. It had been suffering from a weed, and he considered the carcass quite good enough for food. When Mr. John Lawrie was asked to take away he "hummed and hawed" at first, suggesting that it should be taken to the slaughter-house. He agreed ultimately to take and dress the carcass, but was never asked to buy it in witness' hearing. Amongst other witnesses examined for the defence was Mr. Mitchell, who stated that when he visited the shed in which the cow was hung it was quite good enough for human food, and he would have had no hesitation in passing it. Mr. Wyburd, dairyman, said it was necessary to have the carcass dressed to see if it was sound. He believed had the animal been taken in time the flesh would have been quite good, but there was a chance of the blood having spoiled it. Provost Keir, in giving the decision of the Court, said the Court were quite unanimous in believing that the carcass was unfit for human food. They found that there was no sufficient evidence that it was intended for human food. They would, however, take up the case against them for dressing the meat on premises not licensed for that purpose. John Lawrie pleaded guilty to this charge, and he was fined the maximum penalty of £5 with the alternative of one month's imprisonment. The Court gave an expression of their opinion that James Lawrie was not implicated at all.

At Cannock, on August 21st, Thomas Joseph Cox, butcher, Station-street, Hednesford, was summoned by Mr. John Peake, Inspector under the Cannock Local Board, for having on his premises on June 30th, a carcass of a cow which was not fit for human food. Mr. C. A. Loxton prosecuted, and Mr. R. A. Willcocks defended. Mr. John Peake stated that he visited defendant's slaughterhouse at the date named, and there saw the carcass of a beast hung up dressed ready for sale. There were two sides. The internal organs had been

removed. The meat was unfit for human food. Defendant asked him if he would like to see the lights, and he assented. They were brought and were in a very bad state, being diseased. Witness also inspected the liver, which was also very black and flabby. The carcass was diseased, and the lungs were badly marked with tuberculosis. Witness took possession of the meat and submitted it to Mr. Gilpin (Magistrate), who condemned it, and it was afterwards destroyed. By Mr. Willocks: Defendant did not ask him to let the meat lie at the slaughterhouse. Witness had not had much experience with meat, but he could tell that that in question was bad. Dr. Blackford, Medical Officer to the Local Board, said he inspected the meat in question, and his opinion was the same as that of the last witness. He added that there was a deficiency of fat on the meat. He did not see any tuberculosis except in the lungs. For the defence Mr. Willocks contended that though the meat was very lean and there were marks of tuberculosis in the lungs, this was localised, and the carcass was perfectly healthy. In support of this statement he called Francis John Carless, M.R.C.V.S., of Stafford, whose father was Inspector under the Contagious Disease Act for the Stafford district. He had had experience with tuberculosis. On June 30th he was fetched to Cannock by defendant. He drove to Mr. Gilpin's house. The cart containing the carcass was there. Two portions of the lungs were on the carcass. That gave the carcass a very bad appearance. He considered the liver was perfectly healthy. There was an absence of any disease. In the lung witness discovered several spots of localised tuberculosis. The rest of the carcass was free from disease, and in his opinion was perfectly fit for food, and was in no wise unwholesome, though very thin. Unless tuberculosis was generalized, it would not affect the carcass as food for man. He would not have been afraid to have eaten some of the meat himself. Cross-examined: He would not have hesitated to have eaten it in hash. The tuberculosis was of some standing. The general health of the cow would have been affected. The carcass was emaciated. The tuberculosis would affect the carcass to some extent, but not directly. He did not agree that the meat was almost black. The liver was dark. Disease would not cause this darkening unless in the liver itself. There was fat on the carcass, but it was practically without fat. The lights were manifestly diseased, and affected the whole appearance of the carcass. This concluded the case, and the Bench inflicted a fine of £5, and 11s. costs.

At Woolwich, on August 23rd, Frederick Robinson, 24, Star-street, Canning Town, was summoned by the Woolwich Local Board of Health for exposing for sale in Woolwich-market 103 pieces of unwholesome meat. Mr. Bryceson conducted the prosecution. Mr. Mackie, Sanitary Officer to the Local Board, said his attention was attracted to an offensive smell emanating from two barrels at defendant's stall. On examining them he found meat which was unfit for human food. He took possession of it. It was removed to the Board's yard, and on the Monday was condemned by the Magistrate and destroyed. Defendant said he was in the habit of buying odds and ends of meat rejected by the Civil Service Stores, and selling them cheap at Woolwich. He sent a consignment of the meat to Woolwich on the Saturday morning in question. Being ill he went home early, leaving the stall in charge of his son. Before he left he packed the two barrels of remnants, none of the meat being bad at that time. He acknowledged that it was so on Monday, but it had been in a close hot room on the Board's premises since Saturday, and had naturally gone bad. It was not "exposed for sale" when it was seized, but was packed up ready to be returned to London. In reply to Mr. Bryceson, he said that if they had found it bad when it got back to London it would have been destroyed. He had sent a lot of meat to Abbey Wood to be buried a short time ago. He gave 2½d. per lb. for the meat referred to, and bought the finest New Zealand sheep at 3d. per lb. Mr. Bryceson said he understood the defendant would produce the Inspector of the London market, who would prove that the meat was good when he bought it. Defendant said he was away on his holiday, and he really could not afford the expense of bringing him there. Mr. Kennedy asked why he should begrudge a small expense, when he had rendered himself liable to a fine of £5,150, viz., £50 for each piece. Defendant said he served 300 customers on that day with meat, and not one of them complained. Mr. Bryceson reminded the defendant that there was a vehicle in the market in which bad meat could be placed, removed, and destroyed without expense to the vendor. Two female customers of defendant's proved having bought legs of mutton and beef at his stall on the day in question, and that they turned out well. His Worship said he was disposed to make some allowance for the hot weather. Defendant's was a risky business. He had taken upon himself the risk, but had neglected to exercise sufficient care in the instance before them. He would be fined £10, and £5 costs. Defendant: I have not got the money. I am "stone broke." What is the alternative? The Magistrate: Twenty-one days.

At Wimborne Petty Sessions, on August 25th, a butcher named Lonnen was summoned for exposing for sale 68 lb. of beef unfit for human food. Evidence for the prosecution showed that a policeman visited defendant's shop, and found some beef, which looked black and putrid, labelled at 3d., 4d., and 6d. per lb. A cow had been bought for £4, which had calved three days before it was killed. Dr. Harrison condemned the beef, and the Magistrate gave a verbal order for its destruction. Mr. Bell contended that no legal evidence of condemnation had been given, as the order must be in writing. Mr. Curtis pointed out that the Magistrate who gave the order was present on the Bench. The Magistrates dismissed the case on the technical objection raised.

At Brighton, James Valentine Campbell, 43, Derby-place, was summoned for exposing a quantity of fish unfit for food for sale. Mr. H. Talbot prosecuted on behalf of the Corporation. The Inspector, Mr. Cuckney stated that on the evening of the 10th August he saw a barrow of fish in Edward-street in charge of a lad named Benjamin Campbell. On the barrow were one brill, fifty-nine dabs, eight herrings, nine whiting, and thirteen haddocks, and all the fish were very badly decomposed, and quite unfit for food. Witness seized the fish and brought it to the Town Hall, where, the same evening, it was seen by a Magistrate, condemned, and ordered to be destroyed. When witness seized the fish the boy said it belonged to his brother, the defendant, and the defendant's father afterwards came to the Town Hall and made a similar statement. James Campbell, 36, William-street, defendant's father, went into the box and reiterated that the defendant was the owner of the fish. In reply to the Deputy-Stipendiary, Mr. Cuckney said he had cautioned the defendant several times about the condition of the fish he was hawking for sale. Remarking that it was a dangerous thing to sell unwholesome fish, the Deputy-Stipendiary imposed a fine of 10s. and costs, with the alternative of ten days' imprisonment.

BUTTER.

At Fenny Stratford Petty Sessions, William Pullham, was charged with selling margarine as salt butter, at that place, on July 10th. Mr. F. M. Day appeared for defendant. Supt. Lait proved the purchase of the butter, and also spoke as to telling defendant that it was for the purpose of analysing by the County Analyst. Witness produced the Analyst's report, which pointed out that there was only a flavour of butter, and also contained water 8.67, salt 10.15, and fat 81.8. Mr. Day pointed out that the Superintendent sent a boy named Souster for the butter, and that the lad was used to fetching it for his mother, and it was an arrangement with Mr. Pullham and the boy's mother that when she sent her children for butter it was margarine she wanted. Mr. Pullham had not deceived the lad, for if he had given him salt butter he would have charged him 9d., whereas he only charged him 5d. His client had been in business for 45 years, and out of that time he had been 15 years at Fenny Stratford, and had never had a complaint made against him before. Superintendent Lait pointed out that if margarine was sold it should be wrapped up in paper with the word margarine printed on it. Arthur Souster, aged 14, sworn, said that he went to Mr. Pullham's on the 10th of July and asked for half-a-pound of butter; he had some other things. He paid 5d. for the butter and gave it to Mr. Wootton when he came outside. He had never fetched any butter from Mr. Pullham's before. Superintendent Lait deposed that the reason he sent the lad for the butter, was because he had sent the Police-constable on one or two occasions and Mr. Pullham always said he had not got any. He kept the butter in a back room and did not expose it in the shop. Otherwise witness could have demanded it. Defendant made no remark when witness went back with the lad and told defendant the butter was for the purpose of analysing. A fine of 25s. was inflicted, with 10s. costs, or fourteen days.

MILK.

At Coventry, on August 25, William Allen, of Bedworth, milkseller, was fined 10s. and 11s. 6d. expenses, for selling milk which was deficient of 40 per cent. of its natural fat. Defendant said he employed another man to look after the milk, but was reminded of his responsibility for the acts of his servants.

At Brentford, on August 26th, George White, of Windmill-road, Brentford, was summoned for selling milk containing 10 per cent. of added water. Mr. S. Woodbridge defended. The Assistant to Inspector Tyler said that on August 2nd he went to an employé of the defendant, named Hopkins, and asked for a pint of new milk. Witness was served, and paid 2d. He gave the milk to Inspector Tyler. Inspector Tyler said he told Hopkins that the milk would be analysed. The milk was divided into three parts, one being sent to the Public Analyst, one to the defendant and one he produced. The Analyst's certificate stated that the sample contained at least 10 per cent. of added water. The sample was taken in consequence of a communication from defendant. In reply to Mr. Woodbridge, witness said defendant was summoned on the 5th ult. The sample was taken three days before at the request of defendant. He heard defendant say at the last hearing that he had sent his milk out pure. For the defence Mr. Woodbridge said that defendant had been convicted of adulterating milk, and had then maintained that his milk had been tampered with after being sent out. It was in consequence of this that the second sample was taken at defendant's request. Defendant being sworn, the Chairman interposed, and said that under the circumstances they would not impose a fine. Mr. Barber suggested that in future the defendant, if he suspected anything, should take a sample of the milk he sent out. Inspector Tyler said he had suggested to defendant and others, what steps to take. Defendant was ordered to pay the costs of the summons, these amounting to £1 8s. 6d.

At Epsom, on August 21st, Benjamin Penfold, a milk seller, was charged with having abstracted from certain milk a portion of its substance, and with selling the same as new milk. A pensioned Sergeant of the Metropolitan Police purchased from the defendant's wife, at his dairy at Kingswood, a pint of new milk. The wife said they only had that morning's milk in, and he purchased a pint, remarking, "Is this morning's milk new milk?" and she replied "Yes." In reply to Inspector Houghton, the witness said that nothing was said about the milk being skim milk. Inspector Houghton stated that when he went and informed the wife that the

milk was for analysis he asked her if it were new milk, and she said "Yes," but that she had "blown" the cream off. The result of the analysis showed the milk to be 40 per cent. deficient in butter fat. He thought it would take a lot of blowing to get 40 per cent. of cream from it. Defendant stated that the milk had been standing in the dairy from the morning, and when his wife served the milk she merely blew the cream away from the top, instead of dipping it out with the milk. Defendant's wife stated that when both witnesses came she told them that she had blown the cream on one side and dipped out the milk. They did not sell skim milk this hot weather. Defendant was fined 15s., including costs, the Chairman remarking that if they sold new milk they must serve that article.

At Epsom Police-court, on August 21st, Thomas Keen, farmer, of Peacock Farm, Morden, was charged with selling to George H. Ferridge, dairyman, of Sutton, an article of food, namely, new milk, adulterated with 15 per cent. of added water, and which was not of the nature, substance and quality to be delivered to him. There was a second summons against defendant for a similar offence. Defendant, an elderly man and practically blind, was unrepresented, and as he seemed somewhat ill he was granted a seat. He pleaded not guilty, and said he knew nothing about it. Mr. Houghton stated that these proceedings were taken out under the 3rd Section of the Public Health Amendment Act. On the 25th July he received a complaint from Mr. Ferridge that he suspected his milk was not delivered to him as it should be, and the same evening he attended at Sutton, and met the defendant's farm cart as it was delivering two churns of milk to Mr. Ferridge. He took a sample from each of the churns and divided it, and one sample he produced and the other was forwarded to the Public Analyst, and the result of the analysis showed that in one case it was adulterated to the extent of 12 and the other 15 per cent. of added water. He produced defendant's contract with Mr. Ferridge, whereby he undertook to supply pure new milk of good quality, and with not less than 10 per cent. of cream. He believed defendant did not know anything of the adulteration, but his son managed the farm, as the old man was going blind. He was, however, the vendor. George Henry Ferridge, dairyman, Sutton, said he sent to Mr. Houghton because he did not think the milk was as it should be under the contract. The Inspector came the same evening and took two samples of milk from each churn. He took no other milk that night, and there could be no mistake it was from defendant's cart and churns. Defendant said he did not understand the game. He thought a sample of milk should have been given him as well. Witness said it was the water he complained of. Charles Revill, carter, Lower Morden, said the milk taken was Mr. Keen's. He did nothing with it. He saw the Inspector take the samples. Defendant said he had been supplying milk 16 years wholesale and had never been summoned. They never left him a sample of milk, and he did not know what this Inspector did with it after it left his hands. He might have put the water in himself. Mr. Houghton said it was not necessary in such a case to give a sample but a corresponding sample of the same, sealed, was produced in Court. Defendant said his son managed the business. The Chairman asked him if he would like his son to go into the box and swear he did not put water to the milk. Defendant said his son was about somewhere, but did not call him. The Chairman said evidently water did get into the milk somehow, and defendant would be fined £1 including costs, and if brought up again it would be a good deal more. The Chairman thought it would be much better in future in these cases if a sample of the milk was given the defendants, whatever the Act said. Mr. Houghton said in future he would do it for that Court. Defendant—It did not ought to cost me anything. I ought to have my expenses paid. (Laughter.)

At Fenny Stratford Petty Sessions, Harry Lee, butcher, of Fenny Stratford, was charged with selling adulterated milk, at that place, on July 10th. Defendant pleaded not guilty. Superintendent Lait proved purchasing a pint of new milk from defendant's man, who had some in a can for sale. He told the man that it was for the purpose of analysing. The Analyst's report pointed out that the milk was adulterated to the extent of 30 per cent. with added water. Defendant said they could not expect a cow to give so good milk after seven weeks' dry weather as when there was plenty of keep. Defendant was fined £1 2s., with 10s. costs.

At St. Augustines Petty Sessions, Robert Gore, of Herne Bay, was summoned for selling adulterated milk, at that place, on July 10th. Defendant pleaded not guilty. Superintendent Wood deposed that on the 25th July last he purchased a pint of milk at Herne Bay from a servant of the defendant. The milk was being carried round in a can. Witness told the defendant's man, Foad, the milk was to be analysed. He had since received the certificate produced from Dr. Adams, the Public Analyst, showing the milk to contain 24.4 per cent. of added water. A fine of 30s., including costs, was imposed.

Edward Homersham, of Herne Bay, was similarly summoned. Evidence went to show that a quantity of milk delivered by defendant's son contained 18 per cent. of added water. The Bench fined defendant £1 16s., including costs.

At Thorple-le-Soken, William Sutton, milkman, Clacton-on-Sea, was charged with selling adulterated milk at Clacton-on-Sea on July 19. Pleading not guilty. Superintendent Aokers proved purchasing a pint and a half of milk of defendant at Clacton-on-Sea, which he divided into three parts. He offered defendant one-third, and delivered another third to the County Analyst. He told defendant he required the milk for analysis. Witness retained the third

portion himself. On August 5th he received a certificate from the Analyst in which he stated that the milk contained 17 per cent. of added water. Defendant denied putting any water in the milk. He attributed the quality of the milk to the poor pasture and hot weather. Superintendent Aokers added that at the time he bought the milk rain was falling. He added that he had taken seven samples the same morning, and the Analyst reported them all to be of poor quality. The Chairman said considering the reasonable defence set up, the Bench would give defendant the benefit of the doubt and dismiss the case, although they thought Superintendent Aokers did quite rightly in bringing the matter up.

At Cardiff Police-court, on August 22nd, Herbert Goodall, of 57, Portmanmoor-road, was summoned for selling adulterated milk on July 7th. The Analyst's report stated that there was 13 per cent. of water added, calculated from the limit of genuine milk. Mr. Lloyd, Deputy Town Clerk, conducted the case for the prosecution. Goodall called a man named Thomas, from whom he purchased the milk, but his evidence was immaterial. Fined £3 and costs, or 21 days' imprisonment.—James Stark, of Ty Fry Farm, Rumney, was summoned for a similar offence, the Analyst's report, which was put in, stating that the milk was adulterated to the extent of 15 per cent. Mr. Lloyd again prosecuted, and Mr. Rees defended. Mr. Rees said he admitted the Analyst's report, but stated that the milk was sold in the condition in which it was received from the agents. A summons against the servant, which was issued, was consequently not proceeded with. Defendant, on samples being taken of his milk, at once had the milk, which he bought from two different sources analysed, with the result that in one case there was found to be 24 per cent. of water added. A fine of £5 and costs was imposed, or one month's imprisonment.

At Leeds County Court, an action was brought by the Council of the Pharmaceutical Society to recover a £5 penalty, for selling poisonous drugs without being registered, from Arthur Goodall, who keeps a drug store at 191, Meanwood-road, Leeds. Mr. Gray, barrister, London, appeared for the Society, and the defendant was represented by Mr. H. A. Child, solicitor, Leeds. Ethel Moseley, 10, Clifdale-street, Meanwood-road, said she went to the defendant's shop on April 8th and purchased a bottle of Powell's balsam of aniseed. George D. Telfer, 10, Clifdale-street, Meanwood-road, said that he went with his stepdaughter to the defendant's shop, and stayed outside while she went in to purchase the balsam of aniseed. He afterwards saw the bottle she had purchased. Mr. Grey: Were you instructed by the Pharmaceutical Society? Witness: I was. Mr. Child: Was this your first job on behalf of this praiseworthy Society? Witness: No sir. Mr. Child: You have done it in other towns, have you not? Witness: Not much in other towns, but I have done it in Leeds. Harry Moon, clerk in the office of the Pharmaceutical Society, said that he received the bottle produced on April 14. The medicine stamp was still on it, showing that the bottle had not been opened. He handed it over to Mr. Eastes for analysis. Ernest John Eastes, Analyst, said that on July 20 he received the bottle from the last witness for analysis. The stamp was still upon it. He analysed the contents of the bottle and found morphine. Mr. Grey: Was there more than an infinitesimal quantity of morphine in it? Witness: Yes, a good deal. His Honour: You do not get very far by that. More than an infinitesimal quantity might still be very little. Was it appreciable? Witness: Yes, there was a good appreciable quantity in it. Mr. Grey: What was the exact amount? Witness: One-third of a grain in an ounce bottle. Mr. Child: Did you analyse the mixture which was the subject of an action in the Manchester County Court? Witness: Yes. Mr. Child: Was there more or less than in this? Witness: I do not know. Mr. Child: What was that called? Witness: Licoricine. Mr. Child: Was it a mixture for colds? Witness: Yes, but not like this. Mr. Child: It was not for corns and bunions, but for colds and coughs? Witness: Yes. Mr. Grey said that that was all the evidence he proposed to call, and the case was thereupon adjourned until October.

CORRESPONDENCE.

To the EDITOR OF FOOD AND SANITATION.

Can any of your readers kindly give me any information about a case recently tried in one of our courts, when a grocer brought an action against a vinegar manufacturer for breach of warranty in selling as malt vinegar a mixture not answering that description? The grocer is stated to have recovered £300 damages.

A SUBSCRIBER.

To the EDITOR OF FOOD AND SANITATION.

SIR,—Your journal has done so much excellent work in suppressing alum in baking-powder, acetic acid as vinegar, beef stearine in lard, and other adulterations, that I am gratified to find you attacking the use of poisonous colourings in jam, but poisons in jam are not the only adulterations. Good wholesome cane sugar was once in general use for jam making, but most jam manufacturers now use the cheaper, hurtful glucose, obtained from old rags, wood-shavings, &c., and possessing the added objection of being like the acetic acid as vinegar abomination "made in Germany." This substance is not only injurious to the health of jam users, but renders the food less easy of digestion. The use of glucose in jam is undoubtedly an adulteration, and I trust the powerful influence of FOOD AND SANITATION may be used in suppressing it.—Yours, &c., M. D.

BACON FRAUDS.

OUR contemporary, *The National Provisioner*, has in its issue of August 12th, an instructive article addressed to American pork packers. Incidentally it reveals "How it is done," saying:—

"The poorer quality of these hogs, such as are oily, show 'seed,' sow bellies, etc., should be made into backs and bellies. Unless the bellies are very bad and milky they will pass as firsts in the domestic smoked meat trade. And as they are generally cut into strips (for breakfast bacon) a very bad belly would only cause the rejection of a strip instead of a whole side, thus accomplishing one of the great aims in cutting—viz.: that of obtaining the largest quantity of firsts out of second quality material.

"Long rib middles consist of the full side with shoulder on, long ham off, blade pulled, knuckle bone taken out, neck and shoulder bones lifted, ribs left in and leg cut off close above the elbow joint. In trimming, the skirt is lifted (not too closely) and loose fat removed from the flank of the belly and tail end of the back. The shoulder end should be trimmed nearly square with the back, but only deep enough to remove inequalities in the line of the neck, and only deep enough on the surface to remove raggles and blood stains. Care should be taken in removing the inside shoulder bones to see that they are properly loosened before being pulled. Since the advent of the shoulder strap for pulling blades there is not so much attention given to the 'chiselling' as formerly, and we quite frequently see a part of the pocket drawn with the blade. This breaking of the pocket is very objectionable, as it allows the salt to penetrate too freely in curing and hurts the appearance to the side in slicing. Care should also be taken to loosen around the knuckle bone before taking it out, and in every case to keep both holes in the shoulder as small as possible.

"This cut is nearly all exported to Dublin, and made into 'rolled bacon.' It is therefore important to have the side lean, and as nearly as possible an even thickness throughout. The side should be as wide as possible, and no trimming done on the belly unless it is a very bad 'pot.' Rolled bacon looks best when it is an equal thickness from neck to flank. And as the flank is thinner it requires more rolls (therefore more width) to bring it to the thickness through the shoulder. Some packers saw the chime bones at the cutting table, but we do not approve of this, as the meat will in any event fall away in curing and have to be re-chimed before packing. It is more economical to chime 'on all cuts' only at the packing. It is not of so great importance as in other export cuts that the sides

should be absolutely corn-fed or entirely free of seed, but dish-rag, seedy bellies had better not be shipped. If the sides are lean throughout and well proportioned for rolling, they may run all the way from 22 to 32 pounds.

"Cumberlands consist of the whole side of the hog minus a long cut ham, and may run all the way from 22 to 50 pounds. They should be made from good corn-fed hogs, lean but not flabby. Even a very little seed is objectionable in this cut, as is also skinny bellies. Formerly the leg was disjointed at the knee, but is now cut off about an inch above that joint. It will be readily understood that the hook is the least profitable part of the side to the retailer, and the less he has of it the better he will be pleased. So you will have no complaints on the shortness of your hooks, but you quickly will if they are too long. The neck bone and two first ribs are the only bones removed from Cumberlands. The neck itself should be trimmed smooth and clean and nearly square with the back. It is also customary if there is too much neck (caused by poor gutting) overhanging the hook to trim it a little. The skirt should also be taken out and loose fat scraped off the flank of the belly and rear end of the loin. It is also well to remove the blood vein in the shoulder and squeeze out any coagulated blood remaining there.

"Light Cumberland go mostly to the South of England, the greater part being consumed in London.

"We would like to emphasize as strongly as possible the fact that the flank of the belly shrinks a great deal more in curing than the back, and unless the flank is left a bit longer when the ham is being 'slipped' it will not come 'square' out of salt. The belly is the most valuable part of the side, and the customer is not pleased when the belly appears shorter than the back. Do not saw the chime bone at the cutting table.

"Dublin middles are exactly the same in cut as Cumberlands, with the exception of the leg, which is sawed off just above the hook joint. They should run from 18 to 22 pounds and be made from short plump solid sides. The market for these is mostly among the large curers in the South of Ireland, who dry and ship them to the London and South of England markets."

Perhaps some of our readers may be able to inform us to whom these "Dublin Rolled Bacon," "Light Cumberlands," and "Dublin Middles," grown in America, are consigned to be tricked out as Irish and English produce? We have traced some to one Irish M.P., and can promise our readers some very interesting revelations of patriotism and honesty in an early issue.

SIDNEY ORD & CO.'S NEW HIGH-CLASS JAMS

Absolutely Pure and Free from Artificial Colouring.

1, SOUTHWARK PARK ROAD, LONDON, S.E.

SPECIAL NOTICE TO SUBSCRIBERS.

Subscribers are requested to note that Yearly Subscriptions are now due, and should be forwarded forthwith. Back numbers of the Journal are now very scarce, and can only be supplied in future at 1d. per copy. A few complete copies of Vol. I., containing the first 26 numbers may still be had bound in cloth and gold lettered at 7s. 6d. per volume. An index to Vols. I. and II. is in preparation, price 1s. Subscribers requiring index will oblige by communicating with the Publisher. The Index will be complete, giving cross-references to titles, appeals and all convictions, and our readers will readily understand that the charge of 1s. each, by no means defrays the cost of compiling and printing such a large Index as that of Vols. I. and II. of FOOD AND SANITATION.

Subscribers and readers requiring the Index are requested to send their names, and the price 1s., to the publisher at once, as a limited number only will be printed.

"FOOD AND SANITATION" has over 20,000 Readers: Medical Practitioners, Sanitary Inspectors, Food and Drugs Acts Inspectors, Wholesale and Retail Grocers, Weights and Measures Inspectors, Town Clerks, Solicitors concerned with the Food and Drugs and Public Health Acts, Surveyors, Medical Officers of Health, and the General Public.

To the PUBLISHER,

"FOOD AND SANITATION,"
183, Strand, W.C.

Please forward me a copy of "FOOD AND SANITATION," weekly, for twelve months, for which I enclose Six Shillings and Sixpence.

Name _____

Address _____

Date _____

The following is extracted from "THE ANALYST," for March, 1893.

"THE COMPOSITION OF MILK AND MILK PRODUCTS.

25,931 SAMPLES were Analysed in 1892, in the LABORATORY of the
AYLESBURY DAIRY COMPANY, LTD.,

St. Petersburg Place, Bayswater, London, by M. H. Droop Richmond, F.I.C., F.C.S.,
Member of the Society of Public Analysts, the Company's Resident Analyst.

The Samples comprised :—

23,865 of MILK, 566 of CREAM, 8 of BUTTER-MILK, 78 of BUTTER,
24 of WATER, and 22 of SUNDRIES."

MALT VINEGARS.

WE guarantee all the Vinegars we are sending out to be brewed from MALT and BARLEY only—without the addition of RICE, MOLASSES or SUGAR—and that no description of ACID is used in the production of our Vinegars.

Brewery, Birmingham.

FARDON'S VINEGAR Co., Limited.

EDWARDS' DESICCATED SOUP.
IN FOUR VARIETIES.

BROWN—Beef and carefully selected garden Vegetables.

GRAVINA—EDWARDS' Gravy Powder.

WHITE (VEGETABLE)—A purely Vegetable Preparation.

TOMATO—Containing all the valuable, agreeable, and health-giving properties of the fresh tomato, perfect and unimpaired.

Sold by all Grocers, &c. Cookery Book, post free. SOLE MANUFACTURERS—

FREDK. KING & CO., Ltd., 3-6, CAMOMILE STREET, LONDON, E.C.

BANCROFT'S LARD.

BOAR'S HEAD BRAND.

ABSOLUTELY PURE.

We guarantee our Lard to be perfectly free from water or any other adulteration. We only make ONE quality, viz. :—

ABSOLUTELY PURE LARD.

BANCROFT & CO., Ltd., Lard Refiners, LIVERPOOL.

Chafed Skin, Piles, Scalds, Chilblains, Chapped Hands, Neuralgic and Rheumatic Pains, Sore Eyes, Ear-ache, Cuts, Sunburn, Insect Bites or Stings, Throat Colds, and Skin Ailments quickly relieved by use of

CALVERT'S CARBOLIC OINTMENT,

Large Pots, 13jd. each, with full Instructions.

Court Circular says: "We cannot too highly recommend Calvert's Ointment. It is the best general Ointment with which we are familiar, and ought to be a stock remedy in every household."

Private report from Limassol Cyprus: "I have never found anything to come up to it for neuralgic 'Rheumatic Pains.'"

Samples sent Free by Post on receipt of value.

F. C. CALVERT & CO, MANCHESTER.

Awarded 60 Gold and Silver Medals and Diplomas.

DISINFECTION WITH "SANITAS.

A very careful investigation just made by Dr. A. B. GRIFFITHS proves that "**SANITAS**" **DISINFECTANTS**, readily, kill all Disease Germs, including the Microbes that cause

CHOLERA, FEVERS & DIPHThERIA.

"SANITAS" DISINFECTANTS

are Fragrant, Non-poisonous, and do not stain. They embody all the healthful principles of Pine and Eucalyptus Forests, and are the best for general use.

Copies of Dr. GRIFFITHS' REPORT, together with full particulars of

"SANITAS" DISINFECTANTS & "SANITAS" APPLIANCES

Will be sent free on application to

The "**SANITAS**" Company, Lim., Bethnal Green, LONDON, E.

FOOD & SANITATION,

THE ANTI-ADULTERATION JOURNAL;

To Protect the Public from Adulterations of every kind.

A NEWSPAPER TO SUPPORT ENGLISH, IRISH, SCOTCH AND WELSH INDUSTRIES, AND TO SUPPRESS

FOREIGN FREE FRAUD IN ALL IMPORTED ARTICLES.

A Journal for Manufacturers, Merchants, Wholesale and Retail Traders, Grocers and Provision Dealers, Dairy Farmers, English and Irish Produce Merchants and Bacon Curers, Pure Beer Brewers, Distillers, Fruit Growers, AND Agriculturists.

PUBLISHED WEEKLY

BY

M. HENRY, at 183, STRAND, LONDON, W.C.

SUBSCRIPTION: PER ANNUM, POST FREE, 6s. 6d.

GUINNESS'S STOUT.

At Manchester, John Dutton, mineral water manufacturer, was summoned by Messrs. Guinness, brewers, Dublin, for an offence under the second section of the Merchandise Marks Act. The Manchester agent of the prosecutors, having received many complaints from customers as to the quality of the bottled stout supplied to them, caused inquiries to be made, with the result that the defendant was discovered to have mixed with the stout he bought from the firm an inferior article. Defendant admitted the offence, and was fined £10 and £30 costs.

BREWERS' AND DISTILLERS' SWINDLES UPON THE PUBLIC.

A STUDY OF SOMERSET HOUSE IGNORANCE.

IN the columns of the *Church of England Temperance Chronicle*, a correspondence has lately been carried on concerning the adulteration of alcoholic beverages, between presumably a working man, who writes very skilfully on the one side, and a chemist and druggist of St. Leonards on the other. The former has apparently read our journal, the latter the *Pharmaceutical Journal*. We know well that a reader of the *Pharmaceutical Journal* would adopt an attitude, to say the least, not friendly to our aims and views, and we are therefore not at all surprised to read a statement on the part of our pharmaceutical friend that "beer and spirits are not adulterated in the ordinary sense of the word, and that wine is immensely adulterated." We do not know what is the "ordinary sense" attached by the St. Leonard's chemist and druggist to the word "adulteration," but in the definition of the Sale of Food and Drugs Act an adulterated article is one that "is not of the nature, substance, and quality demanded by the purchaser," and when the purchaser demands a glass of ale he expects, in the vast majority of cases to obtain an alcoholic liquor brewed from water, malt, and hops, or when he demands brandy, he expects the alcohol distilled off wine. It is not at all to the point to say that the Inland Revenue Authorities, in their wisdom, have for fiscal purposes allowed the brewer to substitute sugar and glucose for the malt, or silent spirit for the brandy. If they permitted cigars to be made from cabbage-leaves, that would not prevent cabbage-leaf cigars being adulterated rubbish, for the public expects cigars to be made of tobacco. We agree, and we have stated it over and over again, that by the sanction of the Inland Revenue Authorities of the use of malt and hop substitutes, beer made without hop and malt is at present *legally* genuine, and the Public Analysts who have to help in administering the Sale of Food and Drugs Act have no option, in spite of their frequent protests—some of which we have recorded in our Journal—but to pass beer without malt or hops as genuine, that is to say, as complying with the Inland Revenue regulations. Looking at the returns under the Sale of Food and Drugs Act, the advocates of the present system and ignorant exponents of it, like the St. Leonard's Chemist and Druggist, can derive a great deal of cheap consolation and argument therefrom, for they show that malt beverages do comply in their composition with the present Acts, that is to say, are *legally* genuine. We don't deny it. The brewer has received *carte blanche* to brew beer of whatever material or materials he may deem proper, and has sanction to call the product beer. Whatever he makes, provided it is free from absolutely poisonous materials, is "genuine." It is as if an enactment were passed making homicide legal on payment of a small tax to the Inland Revenue. People would be murdered wholesale, but our pharmaceutical friend would say that murder no longer existed in the country.

If he admits that wine is "immensely adulterated," we would ask him what is the difference between the adulteration of wine, which as a rule consists in the addition of sugar to the must, or of ready-made alcohol to the wine, and the practice which he approves of in the case of beer? What we call the adulteration of beer is the substitution of sugar in some form or other for the malt or grain from which beer used to be brewed, or quassia for the bitter of hop. It may be, no one at present is able to adduce positive evidence, that the extraneous sugar yields exactly the same products of fermentation as does the sugar resulting from the mashing of malt. It may be, we say, but there is not a tittle of evidence that it is so. Nothing worth speaking of is known as to the chemical difference between wholesome and poisonous spirits, between raw and maddening whisky, and such that has matured under proper conditions, and still much less is known as to the part the other constituents, besides saccharine ones of malt play in beer, physiologically considered. Chemical diletanti, who have learnt the formulæ attributed to alcohol and starch from a shilling primer, argue glibly, that it cannot matter whether the starch comes from malt or from potatoes, but the consumers, who in their organisms possess far more delicate reagents than the apparatus used at the Pharmaceutical Society, declare that the difference, though not existing on paper, shows itself to them most palpably in the form of headaches and illness in the one case and well-being in the other. It is altogether premature to argue from chemical premises and draw deductions as to the wholesomeness or otherwise of any brewed article, when made by the aid and under the advice of a brewer's chemist but, we know, by the accumulated experience of mankind, that ale and wine made in the good old-fashioned way, from malt and hops, or grapes, are wholesome.

Contrast with the present state of the brewing of beer a similar industry, the brewing of vinegar. No Inland Revenue

regulations have here been made, because there is no duty on vinegar. Consequently anyone desiring to purchase malt-vinegar can insist upon getting it, and if sugar vinegar, or spirit vinegar, or wood vinegar, are given instead of malt vinegar, the vendor knows it to his cost. There are, no doubt, many who would like the rotten Excise regulations which govern the brewing of beer also to be applied to vinegar. We have no doubt, that the Somerset House chemists, who shall here be nameless, would gladly pass a vinegar that may be referred to them under the Sale of Food Acts as genuine malt vinegar, although it may be devoid of malt, just as sugar beer is continually sold with their sanction instead of malt-beer, but public attention is too thoroughly roused, mainly through our exertions in the matter, to permit the corruption of any other trade to the extent of that of the brewing trade.

As to the adulteration of spirits, which is denied by the writer in the *Church of England Temperance Chronicle*, it is notorious, that ten times more brandy is exported from France than can be produced in that country, the bulk of so-called brandy being made up of silent spirit, the product of the fermentation of potato mash. We do not here refer to the immense adulteration of spirits by water only, for that form of adulteration is, of course, a meritorious one in the eyes of the writer in the *Temperance Chronicle*. The usual common or garden ignoramus, like the St. Leonard's chemist and druggist, turns to the Analysts' reports, finds no cases of adulteration of spirits with anything else but water, and concludes that there is no other form of adulteration. But any Public Analyst will tell him, that the real reason of the absence of such returns is not the absence of the adulteration, but the weakness of the chemical knowledge. There are no chemical means which would allow of potato, wine, and grain spirit to be distinguished, and the chemist does not venture to rely upon the evidence of his palate. If he has not a precipitate in his test-tube he is not satisfied. Some time ago we saw in an Analyst's laboratory sixteen samples of spirits, purchased at public houses under the Sale of Food and Drugs Act. They bore no label, except numbers, with no description to identify the kind of liquor contained in the bottles. Of the sixteen, only about eight could be identified by taste and smell, as rum, whisky, gin and brandy, while one half of them, although tasted by a number of expert chemists, could not be classed. They evidently consisted mainly of silent spirit. Yet in the present state of chemical knowledge not a single vendor of these eight samples could safely be prosecuted, and the alcoholic strength only could be taken into consideration.

In view of these facts, our critic at St. Leonard's may safely continue to declare, that, "in the ordinary sense of the word," beer and spirits are not adulterated; but before accusing our journal—as we observe he did in a letter of August 25th—of gross ignorance, he would have been wise in fortifying himself with knowledge a little more precise than the *Pharmaceutical Journal* can afford him. In our issue of September 10th last year we said:—"Some of the methods of brewers are astounding." (We notice our critic denies this, but we gave chapter and verse for our statement). "For instance, a correspondent, writing to the *Brewers' Journal*, November 15th, 1891, says:—'Thanks for your information respecting copper. I should be glad of your advice for the treatment of acid beer for blending. I do not like liquid neutralisers. How would it do to treat impure brewing water with *carbolic*? What quantity for five barrels, and where to be used? I find with *calcium chloride* the beer will not keep; it picks up the original stink!'"

A Mr. P. C. Morgan, on behalf of the Country Brewers' Society, writes in the *Church of England Temperance Chronicle*:

"ALLEGED ADULTERATION OF LIQUOR.

"Sir,—I have read with interest the correspondence on this subject which has appeared in recent issues of your paper, and, I need hardly say, perhaps, I agree with Mr. Kemp, who sums up his case by saying that, as such authorities as Dr. Richardson, Sir Algernon West, and Mr. Goschen cannot give a fact in proof of the deleterious adulteration of liquor, it becomes the abstinence party to refrain from making vain charges against the Trade.

"I will only add that the society with which I have the honour to be connected is perfectly open to conviction, and has, during the past eight or nine years, on every opportunity challenged the veracity of all persons making charges of the kind, at least against beer. These charges have emanated from various sources, including at least three dignitaries of the Church of England, a few London and provincial newspapers, numerous anonymous and other correspondents, &c. But perhaps the strangest thing in connexion with this subject is the fact that, while in no single instance has the charge been substantiated, those bringing it, being unable to take up the challenge, have never even thought it right to withdraw their unproved accusations, or apologise for having made them, in any way whatever.—Your obedient servant,

P. C. MORGAN.

Westminster Chambers,

"5, Victoria-street, S.W., Aug. 26, 1893."

A more colossal piece of impudence than this, in the face of the above excerpt from the *Brewers' Journal*, it would be hard to imagine, but perhaps Mr. Morgan and our St. Leonard's critic do not believe carbolic in beer poisonous or injurious.

This may be, for have we not the evidence of a shining light of the Pharmaceutical Society that alum in food is not injurious! It is not the brewers or their trade that we, however, are concerned with, but the fact the English barley land by the use of substitutes and swindles in brewing of beer and vinegar and distilling, has gone out of cultivation to the extent of 500,000 acres in ten years, that thousands of English workpeople have been thrust out of employment, and important English, Irish, and Scotch industries have been ruined. For that crime against our National prosperity, Somerset House is responsible, and our concern is to bring its responsibility home to it, and enable an Englishman to get once more a glass of pure wholesome English beer in his own land.

HOCUSING THE AGRICULTURIST.

The Royal Commission to inquire into the agricultural depression prevailing in Great Britain, and whether it can be alleviated by legislative or other measures, will consist of the following gentlemen:—The Right Hon. George Shaw Lefevre, M.P. (chairman), Viscount Cobham, Lord Vernon, the Right Hon. Henry Chaplin, M.P., Sir Nigel Kingscote, K.C.B., Commissioner of Woods and Forests, Mr. Robert Giffen, C.B., Assistant Secretary of the Board of Trade; Mr. Charles I. Elton, Q.C., formerly M.P. for West Somerset; Mr. C. N. Dalton, Assistant Secretary Local Government Board; Mr. F. A. Channing, M.P.; John Clay, of Kirchstien, near Kelson, N.B.; Mr. B. L. Everett, M.P.; Mr. John Gilmour, of Montrave, Fife, N.B.; Mr. G. Lambert, M.P.; Mr. W. C. Little; Mr. Walter Long, M.P.; Captain Owen Thomas, Mr. Charles Whitehead, F.L.S. Mr. Chaplin, Sir N. Kingscote, and Mr. John Clay served on the Richmond Commission, while Mr. Little was one of the Assistant-Commissioners. Messrs. John Clay, R. Everett, M.P., and G. Lambert, M.P., are engaged in practical farming, and Mr. W. C. Little and Captain Thomas are engaged in the management of land.

As a specimen of fatuous ignorance going the whole hog this Royal Commission is surely one of the most wretched examples ever placed before the public. Free fraud in foreign food stuffs, in butter, lard, vinegar, bacon, &c., have damaged English and Irish agriculture to the extent of millions of pounds yearly, and robbed the public to the same extent. A worse waste of public time and money than this appointment of a Royal Commission, of which *not one* member is an expert on food adulterations and the laws relating thereto it would be hard to find. He would have to be a very sanguine man who would believe that the opinions of a committee of this calibre would be worth the paper they covered. If agriculturists be wise they will demand that at least one expert, unofficial food Analyst, be added to the Commission.

BLACKPOOL MENDS ITS WAYS.

Since our exposures of the attitude of the Blackpool Corporation towards adulteration, and the strong representations that in consequence of our strictures, influential Lancashire and Yorkshire newspapers and towns, have felt it necessary to make to the officials of that health resort a little very much needed activity has been shown. The Sanitary Inspector has, it is stated, been busy *lately* in taking samples of food for analysis. Why he was not busy earlier the Corporation best know, but we will not now quarrel about it, because we recognise the present action as a step in the right direction. Whether it is all that is required is open, however, to grave doubt. Judging from the fact that it is stated that nearly fifty samples were taken, and that only two resulted in prosecution, it would be well to know the method adopted in taking samples, the area from which they are gathered, and the variety of articles analysed. Every food Inspector knows he can take samples of a hundred articles, well nigh every one of which would be genuine, or that he can take one hundred samples, the majority of which will be grossly adulterated. It depends entirely upon whether he is zealously looking for adulterated articles, or taking samples of the best class of goods from traders who know the time that he will visit them, and to whom his personality is perfectly familiar, and who take care that he is supplied with pure articles of food whether their regular customers are or not. There is such a thing as making a show for reputation's sake, of carrying out an Act in the letter but not the spirit. The taking of fifty samples of which only two resulted in prosecutions may be very good for reputation's sake, and be of pecuniary benefit to the County Analyst, but that is not what we are concerned with. Our journal is not written to make Analyst's fees, but to secure pure food for the public and fairplay for English industries, and to bring about these objects a jealous watch must be kept over all food articles offered for sale, and samples of *suspected* articles taken by expert Food Inspectors. We shall watch how far Blackpool does this. Up to the present we can only note that as a result of our much needed plain speaking, Blackpool—recorded by the Local Government Board, as having "burked" the Acts by taking no samples for twelve months—is stated to have within the last few weeks—since our exposures—taken fifty samples, and that, to this extent at least, the Blackpool Corporation has mended its ways. When will Scarborough, Southport, and other health resorts follow suit?

OUR SCOTTISH SHERIFFS' MUSEUM.

To our collection of Scottish sheriffs begun with the man of Airdrie in No. 20 as follows:—

"Carlyle said that the greatest fool must exist somewhere, and by a parity of reasoning we suppose the most extraordinary sheriff must also exist. We must confess that as regards this particular sheriff's existence we feel very like Talleyrand—*nous n'en voyons pas la nécessité*. If such fearful assaulters of sense and law must tread the earth, it is a matter demanding grave consideration whether they should sit on the bench to the public detriment, or do society a service by consenting to be properly and conscientiously stuffed. Personally we know little of Scotch sheriffs, but if they are all like this one we cannot for the life of us see that they are doing any public service by avoiding the attentions of a skilled taxidermist. Thus treated they might serve a useful purpose by being taken throughout the country from chemical laboratory to chemical laboratory, to afford Analysts a glimpse of the fearful and wonderful objects that may sit in judgment on their certificates."

We feel it necessary to make an addition.

No. 2 shall be the Sheriff of Cupar, Fife, who well deserves to be immortalised by a place in our own museum, not because of his temperance, for we do not object to whosoever pleases being a teetotaler, but we have a very strong feeling that neither teetotalism nor any other ism ought to be allowed as an excuse for any person occupying a judicial position to act against the public wellbeing. Our contemporary, the *Aberdeen Weekly Journal*, apparently shares our opinion, saying of His Lordship of Cupar:—

"The case against them was clear, but, strange to say, the Sheriff dismissed them with an admonition. Being a teetotaler himself, his lordship opined that the more water the whisky contained the better, and so took it upon himself to condone a serious contravention of the Adulteration Acts. This playful mode of construing an Act of Parliament, however much it may commend itself to total abstainers, sets up a precedent which, if acted upon by other traders, might prove inconvenient to the public. It would justify almost every shopkeeper in swindling his customers. If, for instance, he held that lime juice was better with due admixture of water, he would feel it his duty to make the addition—and pocket the resultant profit. And so on with a thousand and one different articles. It is probable that more will be heard of this remarkable decision. Meantime it is certain that no other judge outside the limits of a lunatic asylum will adventure on a like reading of the law, so that the consuming public may make its mind easy. The law of the 'Kingdom of Fife' is not the law of the land."

We agree with our contemporary, save in the statement that "no other judge outside the limits of a lunatic asylum" would so act. What is the matter with his Lordship of Airdrie, with Justices Day and Lawrence, and others who have figured in our pages and give sensible men serious cause for pity? We cannot admit Cupar's claim to a monopoly of judicial curios.

THE ENGLISH DAIRY MOVEMENT.

A dairy school, under the auspices of the County Council, was opened at Gargrave on August 28th. Professor Muir, of the Yorkshire College, was present, and delivered an address on the advantages of the modern processes of producing butter. Sir Mathew Wilson introduced to the notice of the large gathering the "disc" churn, of which it is said that it will produce butter sooner than has hitherto been known. Mr. W. Morrison, who had been invited to open the school, prefaced the formal declaration by making a few observations, in the course of which he regretted that so many butter makers in Craven were to be found to-day using the same method as was carried on by their predecessors one hundred years ago. It was a discredit to England that it should have fallen so very far behind the rest of the European world, and even our colonies, in the art of butter-making. There was a time when French and Danish butter had no reputation at all, but the result of dairy schools being established in those countries was that they had been able to oust English butter from the English markets and wherever high quality was asked for. We in this country ought to beat every other country in butter-making, because there was no country in the world which surpassed our own or even equalled it in the quality of our pastures, the quality of our stock, or the equability of our climate.

And so we would beat every country in the world in butter-making if we had earnest men in place of idlers in our Government departments, and Somerset House referees under the Food and Drugs' Acts capable of distinguishing butter from margarine. What made Denmark's butter industry was its eminent scientific advisers. What has killed our native one has been our miserable so-called Government scientists, of whose ignorance every scientific adulterator has taken advantage. We may establish dairy schools until Doomsday, but the English butter industry will get no chance until we have as referees under the Food and Drugs' Acts capable scientists who will not do as Somerset does, pass a substance as genuine butter one day, and the next certify that another sample of the same substance contains 70 per cent. margarine. The amount of margarine averaged in imported so-called pure butters represents a robbery of the

public of nearly £500,000 yearly for percentages of admixture which Somerset House chemists are unable to detect by analysis, and which foreigners know they cannot analyse. This is leaving out of consideration altogether the open sale of margarine as butter in three parts of England, which robs the public of an enormous sum, and competes fraudulently against English and Irish dairy farmers. A capable society for scientific research, fifty expert Analysts at the Customs' busy testing all imported foods, and a compulsory Adulteration Act, with an array of Analysts and Inspectors, would not cost England one-tenth the sum the public are now plundered of by foreign free fraud, fostered by Somerset House ignorance.

SOMERSET HOUSE THROTTLES ANOTHER BRITISH INDUSTRY.

THE EDITOR OF THE "CIGAR AND TOBACCO WORLD" WRITES re BRITISH CIGARS.

SIR,—Will you kindly spare me space to draw attention to a recent decision of the Board of Customs by which the business done in the exportation of British-made cigars has been brought to a complete standstill? During last year 231,018 lb. of cigars, valued at £112,161, were made in this country and exported, but unless the decision referred to is reversed the quantity exported this year will be nil.

Your readers will be aware that the law provides that a duty shall be paid on leaf tobacco when it is imported, and that this duty shall be returned in the form of "drawback" on cigars and other manufactured tobacco when exported.

British cigar manufacturers have for years past exported cigars to British possessions and to foreign countries, and have received the drawback without question. At the beginning of this year, however, the Custom authorities appear to have become suddenly alive to the existence of an Act passed in 1863, and taking it as their authority refused drawback on a certain exportation of cigars by a well-known and reputable firm. This refusal was followed by others.

The Act referred to (26 Vict., cap. 7) provides that no drawback shall be allowed upon any tobacco, except snuff, in which the contained inorganic matter shall exceed twenty-two per cent. This enactment was evidently intended to prevent the addition of foreign matter to the tobacco in order to increase the weight; but as a matter of fact, the actual amount of inorganic matter in pure tobacco leaf from which cigars are made exceeds twenty-two per cent. in every case, with the exception of a few obscure leaves used for wrappers. Had the law been enforced, no cigars of British manufacture could have been exported since 1863, for obviously the manufacturers could not find a market for them if they were compelled to add to the price an amount necessary to cover the drawback. As a fact, it never has been enforced until now, and, as I have stated, the enforcement has effectually put a stop to the export trade.

That tobacco leaf does contain more than 22 per cent. of inorganic matter will be known to all those who have investigated the subject. Analyses of pure leaf made in connection with the Colonial Exhibition showed the following proportions:—Borneo, 27.12; seed, 29.83; Java, 25.07; German, 25.97; and Connecticut, 25.74.

The question is, will the Board of Customs insist upon absolutely ruining an important industry by enforcing an enactment that has been a dead letter for thirty years?—Yours truly,

THE EDITOR OF THE "CIGAR AND TOBACCO WORLD."

68, Fleet-street, E.C., Sept. 6.

We have shown the effect Somerset House has had upon butter, lard, barley growing, dairy farming, and now we have another industry—British cigar making, upon which the cursed blight of Somerset House ignorance and incapacity has fallen. Still blundering obstinately along, Somerset House succeeds in crushing out one English industry after another as effectually as the heart of England's bitterest enemy could desire. How much longer will this disgraceful and ruinous scandal be permitted to exist?

BACTERIA AND BUTTER.

Our contemporary, the *Daily Chronicle*, in its Science Notes of September 2nd, has the following:—

"The bacteria are now so much the all-in-all of the modern biologist that it is difficult to turn without finding their influence invoked. But there are good bacteria and bad ones, and the Danish dairy experts have, it seems, discovered two which impart a fine flavour to butter that they are regularly cultivated for sale to the factories, just as those flavouring the Dutch cheese are similarly disposed of to the makers of that Batavian staple. As the test of a bacterium is the eating of it, and Danish butter is fast running all but the best of ours out of the market, it is surely not asking too much of the Minister of Agriculture to investigate this question. There is, we understand, no secret in the discovery. Professor Storch, of Copenhagen, has the matter in hand, and Mr. Qvist, of Skanternborg, is already so open with the results of his investigations that the two bacteria which he uses to produce a very superior quality of butter are perfectly well known. All the secret—and that is not impenetrable—is the composition of the nutritive fluids in which each laboratory has found most expedient to propagate the bacteria employed. This can, of course, be ascertained by experiments more profitable than some on which public funds have been recently expended."

VINEGAR PROSECUTIONS.

At Sheffield, on August 30th, John Elliott, grocer and greengrocer, of 907, Sharrow-street, was summoned for selling on July 10th, to Mr. W. Henry Harrison, Sanitary Inspector, a quantity of vinegar, which was not of the nature, substance, and quality required. Mr. Sayer, Deputy Town Clerk, prosecuted, and Mr. A. Neal defended. Mr. Sayer stated that the information was laid by the Medical Officer of Health by direction of the Health Committee. Recently a number of cases had been heard in different parts of the country with reference to vinegar, and the samples had been found to consist of acetic acid, otherwise known as pyroligneous acid, derived from a distillation of wood, diluted with water and coloured. In those cases the purchaser had only asked for vinegar, but in the present case the Inspector had asked for malt vinegar. Mr. Sayer submitted that malt vinegar should consist of a preparation produced by the fermentation of malt, or other grain, and that no other article would answer the description. It was true that vinegar in its generic sense was made from other articles, but always by the process of fermentation. For instance, it was made from wine, from cider, beer, and from preparations of sugar. It might be contended that as acetic acid formed an active essential of all vinegars, therefore the preparation now in question could be stated to be vinegar. That, however, was a contention that could not be supported. It would be a fair illustration to say that it was no more reasonable to call a preparation consisting principally of acetic acid vinegar, than it would be to call a preparation of diluted alcohol wine because it had been flavoured in imitation of sherry or burgundy. By the process of fermentation many valuable properties were given to good malt vinegar, which added not only to the aroma, but to its appetising qualities as a condiment. Although he was not going to argue that the article now complained of was deleterious to health, yet he was advised that if it were taken in excess it was likely to produce indigestion and dyspepsia. Mr. Harrison, Sanitary Inspector, said he called at the defendant's shop on July 10, and asked for a pint of malt vinegar. He was served with it, and paid 3d. for it. It was supplied from a barrel on which was a label bearing the words "malt vinegar." He told the defendant for what purpose he had purchased the vinegar, and defendant remarked that he had heard that there had lately been some bother in Doncaster about vinegar. Mr. A. H. Allen, City Analyst, described the sample submitted to him as a factitious article made in imitation of vinegar. It consisted essentially of acetic acid, derived from the distillation of wood, diluted with water and coloured. In addition, it was adulterated with sulphuric acid in the proportion of 0.25 per cent. of its weight. The sample only contained a trifling proportion of the article commonly known as malt vinegar. Cross-examined by Mr. Neal, Mr. Allen admitted that apart from the small proportion of sulphuric acid, which might have been included in the purchase of acetic acid, the article was not a deleterious product at all. Mr. Neal, for the defence, submitted that the case ought to be withdrawn on payment of costs. He could not contend that what was sold was vinegar, but at the same time laid stress upon the fact that what was sold was a good article, and not deleterious apart from the sulphuric acid. His client bought it believing it to be malt vinegar. Mr. Sayer had said it was a pity they could not get at the manufacturer, but that was no reason for making a scapegoat of the shopkeeper, and convicting him for selling something which was not of the nature and substance demanded. As for the sulphuric acid, he had the manufacturer and brewer in court, and they would say that there was no sulphuric acid put in the liquor by themselves, but that whatever was there might have been included in their purchase of acetic acid. In future the manufacturer was going to have it all tested to see whether it contained any impurities. The article would be sold for acetic acid, and there would be no more heard of it being sold as vinegar. The Bench fined defendant 10s., including costs. The defendant might not have known of the adulteration, and he was at liberty to get an indemnity from the manufacturers, more particularly as the question had been before the public so much lately. Mr. Sayer was about to call on another similar case, when Mr. Neal, interposing, remarked that he defended three other persons similarly charged. He had a technical point or two in one or two of the cases, but he was content to waive them, and allow the decision in that case to stand in the others. John Henry Grainger, 123, Allen-street; Arthur Sampson, 70, Penistone-road; and Eliza Spring, 283, St. Philip's-road, all shopkeepers, were accordingly each fined 10s. including costs on similar summonses. The only points of difference were the proportions of sulphuric acid contained in the vinegar. William Stephenson, chemist, 121, Langsett-road, also appeared in answer to a summons of the same character. Mr. Sayer, who prosecuted, said in this case the sample only contained 2.8 per cent. of acetic acid, only half the usual amount found in imitation vinegar. The defendant, when he sold the vinegar on July 4 to the Sanitary Inspector, gratuitously put a label marked "Malt Vinegar" upon the bottle. He added that it was called malt vinegar, but it was not pure, as there was no such thing in existence. The case was proved by the Inspector. The defendant said he had dealt with the firm from whom he bought the vinegar for 20 years. The firm was Messrs. Slee, Slee and Co., of Horsleydown, London, S.E. Whatever vinegar he had from them he always understood to be malt vinegar, and he had sold it as such. He had relied upon the good faith of the firm, and had been deceived. He put in a letter from the firm, which said that the vinegar they supplied him contained malt, and was of very good quality for the price charged. The Bench considered that the defendant should have known what was the quality of the article

he was selling, and fined him £1 including costs.—John White, shopkeeper, 60, Shepherd-street, also appeared in answer to a similar summons. Mr. Sayer stated that Inspector Harrison went to the shop on July 4, and asked for a pint of malt vinegar. He was served from a barrel bearing a label with the words,

"B. NEWHAM AND CO., SHUDE HILL, FILTRATED MALT VINEGAR."

The defendant said he bought the vinegar as pure malt vinegar, and sold it as such, not knowing he was doing wrong. Fined 10s., including costs.—William Henry Senior, shopkeeper, 51, Penistone-road, was also fined 10s. including costs for a similar offence. Inspector Harrison bought the vinegar from the defendant's shop on July 4. The defendant's excuse was the same as in the previous case.—Mr. Sayer then asked that a similar summons against Boot's Pure Drug Company (Limited) should be withdrawn. It was a case in which Messrs. Boot had had the foresight to obtain a guarantee of purity from the makers. Under these circumstances the case could not go on. The Bench asked why the original vendors were not prosecuted. Mr. Sayer replied that they could not prosecute the firm that gave a warranty.

At South Shields, on August 22nd, Anne Tibbo, widow, of Hebburn Quay, was summoned for selling a pint of vinegar of different quality to that which was requested. Defendant stated that as far as she was aware it was malt vinegar. She had bought it for such from Mr. J. W. Wilson, Assistant Inspector, under Food and Drugs Act, stated that he went to the defendant's shop at Hebburn Quay, on the 7th ult., and asked if she sold malt vinegar. She replied in the affirmative, and he bought a pint for which he paid 2d. He then informed her that he had purchased it for the purpose of submitting it to the Public Analyst. She then said that she had bought the vinegar for "malt vinegar." The Public Analyst's certificate, which was produced, showed that the vinegar was adulterated with 20 per cent. of pyroligneous acid. John Leech, drysalter, of Newcastle, stated that he sold the vinegar to defendant as a genuine article. When witness heard that this prosecution had been instituted he sent word to the manufacturer of the vinegar and also forwarded the sample that was left with Mr. Tibbo. The manufacturers had just written to say that they could not defend the case. They had analysed and acknowledged that it was just as it had passed out of their hands. The vinegar was made from malt and grain barley and was the same as supplied to shops by them all over the kingdom. The firm, witness said, was of over 200 years standing. The Chairman said that it was quite clear that there was no reflection cast upon the defendant, and imposed the nominal fine of 5s. and costs.

SOMERSET HOUSE APPEALED TO.

At Merthyr Police-court, on August 24th, Mr. Casey, grocer, Picton-street, Caedraw, was summoned by Superintendent Thorneycroft under the Food and Drugs Act, for selling vinegar which was not of nature, substance and quality demanded, in that it contained 80 per cent. dilute pyroligneous acid. Mr. Nicholson, from the office of Mr. Harry Cousins, of Cardiff, appeared for the defence on behalf of

MR. S. CHIVERS, TRADING AS S. CHIVERS AND CO., CARDIFF, the manufacturers of the vinegar. Superintendent Thorneycroft stated that on the 21st July he visited the defendant's premises, and asked for a pint of vinegar, with which he was supplied by the defendant's wife. He paid 1½d. for it, and divided it into three parts. He left one part with the defendant's wife, another he took to Dr. Morgan (the Public Analyst), and the third he retained himself. He produced Dr. Morgan's certificate. Mr. North (to the Clerk): You had been read it. The Clerk read the certificate as follows:—

"To SUPERINTENDENT THORNEYCROFT.

"I, the undersigned, Public Analyst for the County of Glamorgan, do hereby certify that I received on the 22nd day of July, 1893, from you, a sample of vinegar marked 'No. 6 A' for analysis, and have analysed the same, and declare the result of my analysis to be as follows:—

"I am of opinion that the said sample contained the parts as under or the percentages of the following ingredients as under:—Genuine vinegar, 20 per cent.; dilute pyroligneous acid, 80 per cent. No change or alteration has taken place in the above sample so as to affect the analysis."

"W. MORRIS."

"Public Analyst's Office, Swansea."

Cross-examined by Mr. Nicholson, the Superintendent said he did not ask for malt vinegar, but simply for a pint of vinegar. He had a sample of the vinegar in his office (this he produced). Dr. Morgan, the Public Analyst, was not present. Mr. North: Do you wish him to be here? Mr. Nicholson: No, I will take his certificate. Mr. North: You have a right to ask for him to be cross-examined. Mr. Nicholson: I am quite content to take his certificate. I had the pleasure of meeting him on Saturday. Sergeant Thorneycroft said he was present at the shop when the Superintendent bought the vinegar, and he corroborated his statement. By Mr. Nicholson: The Inspector did not qualify the vinegar in any way. Mr. Nicholson: You are no relation to the Inspector, are you? Witness: I am his nephew. Mr. Nicholson then addressed the Bench. He said the summons charged the defendant with adulterating his vinegar to the extent of 80 per cent. of pyroligneous acid. Primarily, it looked very bad against them, but when he produced the evidence he proposed to call before them, and a gentleman whom he had brought all the way from the London School of Analysis, and who held several diplomas, he submitted, there would be thrown upon the case reasonable doubt as to whether this sample of vinegar was diluted or not. His Analyst told him that there was no pyroligneous acid present at all. There was acetic acid in it, which was the same thing, but in a purer form, because acetic acid was an essential principle of vinegar, as much as alcohol was

principle of whisky. He was instructed, although personally not a chemist, that acetic acid was essential, and that the sourness of vinegar could not be produced without it. He submitted the following points, of which Mr. North made a note:—That no impure acetic or pyroligneous acid was present in the vinegar; that pure acetic acid was present of the substance and quality suggested by the British Pharmacopœia, that pure acetic acid was an essential of vinegar, and was generated in the process of manufacture, and that if even pure acetic was added in a diluted state to the vinegar it would not be injurious to health or to the prejudice of the purchaser. Mrs. Casey, wife of defendant, said she remembered Superintendent Thorne coming to her shop and asking for a pint of vinegar. She explained how it was divided, and said that afterwards a man called for the bottle. Mr. Samuel Chivers, vinegar manufacturer, Grangetown, Cardiff, said he had from twenty-five to thirty years' experience in vinegar making. He explained the process of manufacture. Vinegar could not exist without acetic acid, and when purified pyroligneous acid became acetic acid. Having made that statement he did not hesitate to say that the sample of vinegar produced was brewed at his works. It required a very large and extreme plant to make vinegar by acetous fermentation, and he had spent about £4,000 upon his plant. There was no acid added to the vinegar which he manufactured; commercially, it would be impracticable to make vinegar from acetic acid, and sell it at the same price and get the same profit. All the acid was produced in the process of fermentation. Milton Beeny, foreman at Mr. Chivers' works at Cardiff, also described the process of manufacture. He could not do very well without acetic acid being in the vinegar; it made it sour. The addition of acetic acid would cost his employer more money. He knew nothing about pyroligneous acid, and did not use it. All the acid was produced by fermentation. Mr. Frederick Davies, B.Sc., Associate of the Pharmaceutical Society, and also registered Science Teacher, Science and Art Department, South Kensington, said he received a sample of vinegar from Messrs. Chivers and Co., on the 25th August. He had analysed it, and found it to contain 4.52 per cent. of real acetic acid. He had got that quantity by test in accordance with the British Pharmacopœia, obtained by a solution of caustic soda; he also subjected it to a process of distillation. He found it perfectly pure, with no sign of tar in it. It was known as the volumetric analysis. Pyroligneous acid and acetic acid, if pure, were precisely the same. Taken in certain quantities he would certainly say that acetic was beneficial to human health. The Bench said that Mr. Nicholson could send a sample to Somerset House, and Mr. Nicholson said that, in ignorance of the law, this course had been taken by Mr. Chivers, and the authorities had returned it saying that they could not analyse it without instructions from the Magistrates. The Stipendiary stated there was strong conflict in the case, and agreed to adjourn the case until the 18th September, so that the authorities at Somerset House could analyse the vinegar. Mr. Nicholson asked that the sample might be impounded, and this was done on payment of the usual fee.

FOOD AND DRUGS ACT LEGISLATION.

The *Pall Mall Gazette* September 6th, says:—

"Some joint effort will probably be made in the autumn sitting by the members interested in various bills dealing with the examination and analysis of food. The increasing importance of the pure food question has led several members to engage in the discussion of efforts at legislation against adulteration and fraud; but all the bills projected are in a state of animation which has been suspended so long that resuscitation is impossible except after the refreshing interval of the recess. The effort will be renewed to get all these bills referred to a Select Committee on the whole subject of food adulteration, with a view to more drastic legislation against the adulterator, who in most cases is a foreigner."

HOW WERE THESE WONDERFUL SAMPLES COLLECTED AT PERTH?

Mr. Tatlock, the City Analyst, in his quarterly report ending 30th June, states that he had received 40 samples for analysis—viz., 10 of sweet milk, 10 of skim milk, 5 of oatmeal, 5 of flour, 4 of coffee, 3 of pepper, and 3 of cream of tartar—all of which were genuine with the exception of the cream of tartar, which contained 1.86 per cent. or thereby of sulphate of lime, which was extraneous to cream of tartar. Councillor Moir, at the monthly meeting of the Police Commission last night, said that they got lots of analyses of sweet and skim milk. In this warm weather it was very necessary to get a good dram if one knew where to get it, and he thought that a few samples of that should be taken. The Clerk (Mr. William MacLeish) said that these were taken occasionally, and had always been so good that it had just been let alone for a little. (Laughter.) Councillor Mailer thought that they should include whisky and beer as well.

COCOA.

At East Kerrier Brewster Session, James Reynolds, grocer, Constatine, was summoned for selling cocoa of insufficient quality as demanded by Superintendent Beer. Defendant said the Superintendent only asked for cocoa, not for pure cocoa (laughter). He had neglected to put the right label on the packet. The article was not sold to him (defendant) as pure cocoa. The Analyst's report showed that the packet contained 40 per cent. of starch and sugar. The Chairman told defendant he would be dealt with lightly this time, but if he came before the Bench again he would be dealt with severely. He would now be fined 10s. and 16s. 6d. costs.

GERMAN YEAST.

Noah James, grocer, Gilfach Goch, was summoned at Pontypridd by Superintendent Evan Jones for selling adulterated German yeast. Superintendent Jones said he visited the defendant's shop at Gilfach Goch, and purchased 1oz. of German yeast, for which he paid 1d.; he offered to divide it into three parts, but the offer was not accepted. Superintendent Jones then sent the sample to the Public Analyst, and on August 17th received a certificate which stated that the sample contained genuine yeast 50 per cent., potato starch 50 per cent. The Stipendiary asked if German yeast was similar to other yeast. Superintendent Jones: Oh, yes; quite similar. The Stipendiary: Is it much cheaper to have starch than yeast? Superintendent Jones: Oh yes, very much cheaper; yeast costs 1d. per oz. The Stipendiary (to the defendant): What have you to say, Mr. James. Superintendent Jones: He told me, sir, that he bought it as pure yeast, and when he found out that it was adulterated he wrote to the Company about it, and read a letter in reply. I have taken a number of samples lately, but this was the only one I found adulterated. His Worship then read the letter which the defendant had received, and asked where was the wrapper referred to in the letter. The wrapper was then produced, and on the wrapper was printed "This is sold as a mixture of yeast and potato starch, and is not injurious to health." The defendant said he had never seen this wrapper until it was sent to him by the manufacturers. The Stipendiary: But it is distinctly specified in the circular, as well as on the bags, so it says in the letter from the manufacturers. Would you like to say what you have to say on oath? The defendant: I have nothing to say, sir, but I will be sworn if you please. Mr. James then gave evidence and said: I am a grocer carrying on business at Gilfach Goch. I had this yeast in June last from my father-in-law, who lives in the Ogmore Valley. He has been using this yeast for years. The manufacturers in their circular say that it is a mixture of yeast and potato starch, but they gave me no intimation of the fact before I wrote to them, and then they advised me to sell it as a mixture of yeast and potato starch. It states on the bag that it is a German yeast. The Stipendiary: Very well; we will [do the best we can for you. You must pay the cost of the prosecution, which is £1 10s. 6d., but we would advise you to be very careful in future as to what you sell. If you sell this stuff you must sell it as yeast and potato starch.

BUTTER.

At Merthyr Police-court, on August 28th, Thomas Jones, grocer, Caedraw, Merthyr, was sued for selling butter which was certified by the Public Analyst to contain 19½ per cent. of water. Mr. W. Beddoe defended. Superintendent Thorne said he visited the defendant's shop on the 21st July and asked for half a pound of butter, which was handed to him by the defendant, to whom he paid 6d. Mr. Beddoe argued that no offence had been committed, the complainant having asked for butter, and having received butter. In support of his argument, he cited the case of Lane v. Collins, 52 L.T.R., p. 57. The Bench dismissed the summons on the case quoted, Mr. Beddoe intimating that he had a good defence upon the merits.

At the South-western Police-court, on September 1, Mr. de Rutzen heard a summons, issued at the instance of William Gardner, an insurance broker, of 2, Nelson-square, Blackfriars, against John Walter Braine, grocer, of Lavender-hill, for selling margarine for butter. Mr. Frederick W. Beck, for the prosecution, said the proceedings were not taken by the local authorities, but by the instructions of wholesale firms in the City, who were interested in the matter. Mrs. Braine, who served the butter, said she gave margarine in mistake. Mr. de Rutzen fined Braine £3.

At Dublin, on August 31st, Mr. Kane, Food Inspector, summoned John Burns, provision merchant, of 3, Talbot-street, for having sold to him one pound of margarine as butter. The Inspector handed in Sir Charles Cameron's analysis of portion of margarine, in which it was certified that it consisted nearly altogether of fats foreign to butter and prepared in imitation of butter. Mr. Hanmore, who defended, said Mr. Burns had been for over thirty years in business, and this was the first time he had been summoned. When the purchase was made his client's wife was ill, and Mr. Burns himself was not present. The sale was made by a new man in his employment. A fine of £5 was imposed.

At Blackpool Police-court, on August 24th, Sarah Ellen Turner and Emma Sykes, grocers, of Bolton-street, South Shore, were summoned for a breach of the Food and Drugs Act. Inspector McDonald proved the purchase on July 23 of a pound of butter from the defendants. The sample was sent for analysis to Dr. Campbell Brown, who certified that it contained 16 per cent. of foreign fats and 10 per cent. of water. Mr. Steele, in defence, said it was purchased at 99s. per cwt. as pure butter by the defendants, who had only been in business about nine months. The Magistrate found the case proved, and imposed a fine of 20s. and costs, but would not allow the advocate's fee.

At Newcastle Sessions, on August 28th, Thomas Brassington, grocer, &c., Fletcher-street, Newcastle, was summoned for exposing for sale unlabelled margarine on July 22nd. Mr. Watson prosecuted, and Mr. Sproston defended. Police-sergeant Bentley stated that he visited defendant's shop on the day in question, and saw the margarine, which was not labelled. Before he left the shop, however, defendant's wife produced a label bearing the word "margarine," which she said she found at the further end of the counter. Mr. Sproston submitted that only a technical offence had been committed, as the label had been left off the margarine by an

accident. Mr. Watson contended that the offence was a direct one under the Act, and if it was admitted as an excuse no conviction could be obtained. Defendant, he pointed out, had been convicted before, and consequently he asked the Bench to inflict a substantial penalty. The Bench, while thinking the case was a proper one for a prosecution, thought no fraud had been intended, and imposed a penalty of 5s. and costs.

At Wolverhampton Police-court, Fanny Sunderland, a small retail grocer in Cross-street, Wolverhampton, was fined £5 and costs for selling margarine without its being properly labelled.

Mr. I. Avery, grocer, Hassocks, was summoned at Hayward's Heath (Sussex) Petty Sessions, on August 28th, for exposing for sale unlabelled margarine. Mr. Henry Moore, Food and Drugs Inspector, stated that on July 28th he visited defendant's shop and there found a number of half-pound packages of margarine exposed for sale. The packages bore the word "margarine" in small letters, and not large enough to meet the requirements of the Act. Defendant appeared to be quite ignorant of the provisions of the Margarine Act. He was fined 20s. and costs.

At the same Court, Mr. Ebenezer Austen, grocer, St. John's Common, Burgess-hill, was also summoned for exposing for sale unlabelled margarine on July 29th. Defendant was represented by Mr. Kerridge, who pleaded guilty. Mr. Moore stated that in this case the packages of margarine bore the word "margarine" in letters not large enough to meet the requirements of the Act. Mr. Kerridge said a mistake had been made with regard to the size of the letters. The object of the Act was to prevent margarine being sold as butter, and in this case it was not sold as butter. He therefore urged that the smallest possible fine should be inflicted. Defendant was fined £1 and costs.

At the Rowley Police-court, on Wednesday, Thomas James, grocer and provision dealer, Waterford-lane, Old-hill, was summoned at the instance of Mr. Morris, the Inspector for the district, for exposing for sale margarine which was not labelled. Mr. Morris said although he did not ask the Magistrates to inflict a heavy penalty he thought it his duty to state that the defendant had been grossly careless in the conducting of his business. He had labels in his possession, but did not think it was advisable to use them. Defendant pleaded guilty, and was fined 10s. and costs.

Harry Long, an employé of Messrs. Spittle and Co., grocers, Wednesbury, was charged with refusing to supply to Mr. Samuel Toy an article for the purpose of analysis. Mr. Lawrence prosecuted, and Mr. W. H. Thompson defended. Mr. Toy said he saw defendant with a cart laden with provisions in Reddal-hill, Cradley-heath. He asked him for three-quarters of a pound of butter, tendering 2s. in payment, but he refused to sell, unless witness bought the half cask. He further said he had no scales, and when witness told him that he would lend him his, and that he wanted it for analysing, he refused to let him have it. The Bench held it was exposed for sale, and fined defendant 20s. and costs.

WHISKY.

At Lincoln, on August 25th, Herbert Brook, licensed victualler, Laughterton, was summoned under the Food and Drugs Act for selling adulterated whisky. Police-constable Patchett on the 18th July visited the defendant's house and purchased a pint of whisky, which upon analysis was found to be 15.7 degrees below the legal limit. Defendant admitted the case, and said it was his wife who made the mistake. He was fined 10s. and 4s. 6d. costs.

DILUTED WHISKY AND UNJUST BALANCES.

At Milverton, on August 30th, John Johnson, of the Stag's Head Inn, Offchurch, had £5 and costs to pay for selling whisky which was 37.6 degrees under proof; for having a spring balance which was unstamped he was fined 2s. 6d. and costs; and for having in use steelyards which were marked bad, and were 2lb against the purchaser, he was fined 5s. and costs; in all he had £6 17s. to pay.—Frank Gardner, grocer, Cublington, was fined £2 and costs for having a spring balance which was 2oz. against the purchaser. The Magistrates considered this a bad case, as it was a patent balance which was wrong; for having an unstamped scale defendant was fined 2s. 6d. and costs; and for having a steelyard 2lb against the purchaser he was fined a similar sum. In all Gardner had £3 17s. 6d. to pay.

Mr. MacLennan, and the other Sanitary Inspectors of the County of Fife, have, by instructions of the County Council, had several samples of whisky analysed. Andrew Buist, hotel-keeper, Torryburn, was, on August 21st, at Dunfermline Sheriff Court, convicted of having in a tent on Dunfermline Race Park, on the 15th of July, sold to the Sanitary Inspector of the district a pint of whisky adulterated by water, which, contrary to the Foods and Drugs Act, reduced the spirit more than 25 degrees under proof. The libel set forth that because of the adulteration the whisky was not of the nature and substance of the article demanded. Sheriff Gillespie said that the adulteration with water would not do much harm to the purchasers of the whisky. As a teetotaler, he did not much object to the water, but the Statute specifically stated that whisky should be a certain strength, and the whisky sold by the accused was under the strength fixed by the Act. The sentence of the Court would be a fine of 10s. or three days.

At Aberavon Police-court, on August 31st, before the Mayor (Councillor Charles Jones), and the Deputy Mayor (Councillor H. Walsh), Elizabeth Davies, of the Oddfellows Arms, Pantdu, was summoned by the police for selling half-a-pint of whisky and also half-a-pint of rum to the prejudice of the purchaser, which was 30 and 32 degrees respectively under proof, on the 24th July.

Inspector Cole proved the purchase, and Superintendent Thomas deposed to delivering samples of the spirits to the Analyst, and he produced the latter's certificate. The Bench inflicted a fine of £1 12s. 6d. in each case, including costs.

At Aberdare Police-court, Thomas Lewis Jones, defended by Mr. P. T. Rhys, was charged with a similar offence. Defendant is landlord of the Scales Arms, Cwmbach. The Public Analyst's certificate stated that the whisky was 33 degrees under proof. Mr. Rhys said the defendant had only been in the house for three weeks, and he attributed the offence to inexperience of the trade. A fine of 10s., or fourteen days' imprisonment was inflicted.

RUM.

At Hythe, on August 22nd, Sarah Stapleton, landlady of the Ordnance Arms, was summoned by the Superintendent of Police for selling half-a-pint of rum that was 16.62 degrees under proof, and half-a-pint of whisky 17.91 degrees under proof on the 22nd ult. A fine of 30s. with costs, was inflicted for each offence.—George Reece, landlord of the Gate Inn, was also summoned by the Superintendent for selling spirits under proof, and he was fined 15s., including costs.

COFFEE.

At Aldershot, on August 31st, Robert Head was summoned for selling coffee adulterated with chicory. For the defence it was urged that there was no guilty knowledge, and that the tin was marked "French coffee mixed with chicory." Case dismissed.

At Aberdare, Thomas Mills, grocer, Ynysllwyd-street, was charged with selling coffee containing 50 per cent. of chicory. Inspector Jennings deposed to purchasing the coffee and dividing it into three parts, and Superintendent Thorneby proved sending a sample to the Public Analyst, and handed in his certificate. Defendant pleaded ignorance, and was fined £1.

MILK.

George Arnold, of High-road, Chiswick, was on August 31st, at the West London police-court, summoned for selling to Mr. Tyler, the Inspector for Middlesex, new milk adulterated with 10 per cent. of added water. The defendant stated that since he had lost his own cows he had had to purchase his milk. He had never got into trouble whilst he had them, but only since. Two previous convictions were proved against Arnold, one being so recent as the 4th August in the present year, when he was fined. He was now fined 72s. 6d. including costs.

At Edmonton Petty Sessions, William Bazley, Fore-street, Edmonton, was summoned for selling milk adulterated with 10 per cent. of water. Mr. Tomlin having produced the certificate, informed the Bench that the defendant had been previously convicted. The Bench ordered him to pay a fine of £5 and costs, with the alternative of one month's hard labour.

At Sunbury Petty Sessions on August 28th, Robert Gibbons, Lea-croft Farm, Staines, was summoned for selling adulterated milk, on July 31st. Edward Watkins stated that he went to a cart belonging to Mr. Gibbons, which was standing in the Laleham-road, Staines, and purchased a pint of milk from the lad (Mott) in charge, paying twopenny for it. Mr. Walter Tyler, Inspector under the Food and Drugs Act for Middlesex, said he had sent a portion of the milk to the Public Analyst, and received a certificate stating that it contained 18 per cent. of added water. Mr. Tyler added that he had taken a very large number of samples from the defendant's cart at all times, and they had always been good before. Defendant said that unfortunately, there was a leakage in his refrigerator, which accounted for the water in the milk. The Clerk said a fine of 21s. including costs, would be imposed.

John James, of Laleham-road, Staines, was summoned at the same Court, for selling, on July 31st, a pint of milk which was not of the nature, substance, and quality demanded, it being adulterated with 18 per cent. of added water. The evidence necessary in the case was given, and the defendant was fined 21s. including costs.

At Wood-green, William Henry Attwood, of Commerce-road, Wood-green, was summonsed for having in his possession milk from which 20 per cent. of fat had been extracted. The sample was taken by the Inspector's Assistant on the 26th of July. Defendant said that the milk was supplied by his wife, who did not think that the Assistant asked for new milk. Defendant was mulcted to the extent of 10s. and costs, and 10s. 6d. the Analyst's fee.

At Dublin-street, on August 31, Mr. John Hickey, Food Inspector, at the instance of the Corporation, summoned Joseph Corcoran, dairyman, 33, Cuffe-street, for adulterating new milk. Mr. Hickey produced Sir Charles Cameron's certificate, in which it was stated that the milk had been deprived of fat cream to the extent of 20 per cent. A fine of £1 was imposed.

At the Old Hill Police-court, on August 30th, Sarah Wellings, milk dealer, Old Hill, was charged with selling milk with a portion of the cream abstracted without giving notice to the purchaser. Mr. Lawrence prosecuted, and Mr. J. Wright defended. The evidence for the prosecution was that on the 24th July, Mr. Samuel Toy, assistant to Mr. J. C. Morris (Food and Drugs Inspector), saw defendant's boy selling milk at Old Hill. He purchased half-a-pint, and paid a penny for it as new milk. The analysis showed that the milk was half skim and half new milk, with a little water. The boy afterwards said it was skim milk, and wished to return a halfpenny. Defendant's daughter spoke to skimming Sunday night's milk on Monday afternoon, to adding nothing to it, and to instructing Smith to sell it as skim milk. Defendant was fined 20s. and costs.

THE SOMERSET HOUSE SCANDAL AGAIN.

At Blackpool Police-court, on August 29th, Frederick Charles Smith, local manager of the Sudbury Dairy Company, (for whom Mr. Read appeared), was summoned for an offence against the Food and Drugs Act. Inspector Macdonald said that on Sunday, the 30th July, he saw defendant in Church-street and asked him for a pint of milk. He was supplied from a kit, and paid 1½d. for it. He told defendant it was for the purpose of having an analysis. They went to their office in Abingdon-street, and put it into three 8oz. bottles. He gave defendant one, one was sent to Mr. Campbell Brown of Liverpool, and the other he retained and produced in court. The certificate produced was from Mr. Brown, who said the milk contained 2.98 per cent. of fat, and 8.01 per cent. of other solids, making a total of 10.99. Upwards of five parts of water had been added to every hundred parts of the very poorest milk. By Mr. Read: There had been some rain on the Saturday night. They took 15 samples of milk that morning, amongst which was Parkinson's. He had not seen the latter coming away from the Company's shop. He had heard that the Company was supplying the Sanatorium. In defence, Mr. Read quoted a case where milk taken fresh from the cow was found to contain more than 7½ per cent. of water, and as theirs only contained 5 per cent, how were they to be fined? Samples had been forwarded to the Commissioners of Somerset House, but Professor Lloyd had written to say that the bottle had burst with the heat before it was examined. The Bench said there was not a strong evidence of guilt, and they gave the Company the benefit of the doubt. The case was dismissed.

At Cardiff Police-court, on September 7th, Albert Gaze appeared in answer to an adjourned summons charged with selling adulterated milk. Mr. F. C. Lloyd was for the prosecution, and Mr. George David defended. The analysis was admitted, but Mr. David pleaded that there were certain extenuating circumstances which should weigh with their worships in mitigation of penalty. The milk which the defendant retailed was obtained under a contract from a wholesale dealer near Weston, who contracted to "supply a certain number of gallons of pure milk per day." Although these were the terms of the contract, it was unfortunate for the defendant he did not receive a warranty with every consignment of milk. He, therefore, could not be relieved from the liability. Defendant was fined £3 and costs. Clara Hodges, of 26, Flora-street, was charged with a similar offence on the 10th August. The percentage of added water was 24, the defendant being fined 40s. and costs. Matilda Hutton, of 191, Cowbridge-road, was fined 40s. and costs for selling milk adulterated with 10 per cent. added water. James Simpson, of 11, Pentrebane-street, Grange-town, for selling milk with 14 per cent. added water, was fined 20s. and costs.

At Kilmarnock Police-court, on September 4th, before Bailies Mc'Graw and Baird, Joseph Smith, farmer, Townend, Riccarton, was convicted of selling milk which on analysis was found to be 25 per cent. deficient in natural fat. Accused denied having tampered with the milk, and attributed the defect to the cows being bare and the grass poor. He was fined in £1 or seven days. (This is the first case of the kind tried by the Magistrates.)

At Coventry, on September 1st, William Allen, milk-seller, Marston-ane, Bedworth, was summoned for selling milk deficient of 40 per cent. of its fat, at Bedworth, on August 1st. Mr. Tomkies, clerk to the Foleshill Rural Sanitary Authority, prosecuted. Mr. Samuel Pitchforth, Inspector under the Food and Drugs Act, deposed to purchasing milk from defendant's daughter Prudence; and Dr. Bostock Hill certified the deficiency as above stated. Defendant said he left home at 5.30 a.m. and pleaded ignorance of the condition of the milk, but the Chairman aired a Latin quotation, and the defendant had the wisdom to look awed as if overwhelmed by the scholarly attainments of the Coventry Nupkins. This so tickled the Chairman that he perpetrated the further folly of a fine of 10s. and 1s. 6d. costs.

At Merthyr Police-court, Thomas Morgan was charged with selling milk containing 8½ per cent. of water. Superintendent Thorneycave the necessary evidence, and defendant, who stated that he sold milk bought from another man, was fined 2s. 6d. and costs. Robert Martin was charged with selling skimmed milk. Superintendent Thorneycave said he asked for a pint of new milk, and it was found that it was skimmed. Martin was fined 10s. and costs and the analyst's fee, or fourteen days' imprisonment.

Robert Gore, of Herne Bay, was summoned at Canterbury, on August 19th, for selling adulterated milk. Supt. Wood deposed that, on the 25th July last he purchased a pint of milk at Herne Bay from a servant of the defendant. Witness told the defendant's man, "load, the milk was to be analysed. He had since received the certificate produced from Dr. Adams, the Public Analyst, showing the milk to contain 24.4 per cent. of added water. A fine of 30s., including costs, was imposed.—Edward Homersham, of Herne Bay, was similarly summoned. Evidence went to show that a quantity of milk delivered by defendant's son contained 18 per cent. of added water. The Bench fined defendant £1 16s., including costs.

At Barry Dock, on August 31st, Mr. Dunn was charged by Inspector Lees with selling adulterated milk on Sunday, the 30th ultimo. The officer stated he purchased a pint of the fluid from defendant's daughter. It was divided in the usual manner, and a portion was sent to the Public Analyst, to be analysed. The milk, according to the observations of the Analyst, contained 100 parts of genuine milk to 9 parts of water, or 9 per cent. of extraneous or added water. The defendant had previously been convicted. The penalty was £1 and costs.—Two brothers, carrying on business at Barry Dock, named Johnson, were afterward charged with selling milk which

contained 10 per cent. of water, and it was found that 70 per cent. of fat had been extracted. The Analyst remarked that the sample of this milk sent to him was nothing less than a mixture of water and skimmed milk. They were afterwards charged with extracting 70 per cent. of butter from pure milk and adding water, and thus selling it as the genuine article. The Bench said they must protect the public, and fined the defendants £2 and costs.

At Aldershot, on August 21st, Richard Heath, dairyman, was summoned for adulterating milk with water. The analysis showed 10 per cent. added water. Convicted and ordered to pay £2 2s., including costs.

Theophilus Slater, milk dealer, 5, Wide-street, was ordered, at Liverpool, on August 31st, to pay 20s. and costs for selling milk which, on being analysed was found to contain six parts of water to every 100 parts of the poorest milk.

At Cardiff Police-court, on September 1st, (before Dr. H. J. Paine and Aldermen D. Lewis, Jacobs, and D. Jones) Albert Gaze, a milk seller of 96, Broadway, appeared under an adjourned summons to answer a charge of adulterating milk. Mr. F. C. Lloyd, Deputy Town-Clerk, appeared for the prosecution, and Mr. George David defended. The case had been adjourned for the purpose of having an independent analysis made. Mr. David stated that in the face of the independent analysis he could not dispute the correctness of the analysis produced at the last hearing. There were some extenuating circumstances which should be taken into consideration. The milk was obtained by defendant under contract from a farmer near Western, and the contract was to supply a certain quantity of pure milk per day. Defendant did not receive a warranty with every lot of milk, and although there was a warranty in the contract it was general and not specific, and was not taken into account by the law. The Bench imposed a fine of £3 and costs.—Clara Hodges, of 26, Flora-street, was charged with a similar offence on August 11. Evidence was given by Inspector Glover, and Mr. Lloyd, who prosecuted, said the certificate of analysis stated that there was 24 per cent. of added water. Mr. David defended. Defendant was fined £2 and costs. Matilda Hutton, of 191, Cowbridge-road, was fined £2 and costs, for selling milk on August 2, containing 10 per cent. of added water. James Simpson, of 11, Pentrebane-street, Grange-town, was summoned for a similar offence, the sample taken from him containing 14 per cent. of added water. Defendant stated that he had only bought the milk a few minutes before the sample was taken. He had been out of work and was in poor circumstances. A fine of 20s. and costs, or, in default, 21 days, was imposed.

DEFAUDING THE PAUPER.

At Dublin, on September 1st, Nicholas Hughes, 208, Great Britain-street, appeared on summons issued at the instance of Mr. Alexander Fraser, Master of the South Dublin Union, who complained that the defendant on the 24th of July, supplied new milk to the Union, which was adulterated by being deprived of at least 40 per cent. of its fats. James Cullen, of 36, North King-street, was also summoned by Mr. Fraser for having on the same date supplied the Union with milk "adulterated by being deprived of nearly all its fats." Mr. MacSheehy, Solicitor to the Corporation, prosecuted; and Mr. Philip Keogh (instructed by Mr. John Ennis) appeared for the defence. Sir Charles Cameron, Public Analyst, who attended, certified, in the case of Nicholas Hughes, that the sample of milk which he analysed had been deprived of at least 40 per cent. of its fats, equal to the addition of at least 20 per cent. of water. In the case of James Cullen his certificate was to the effect that the sample which he analysed was deprived of nearly all its fats, of which it contained only 0.4 per cent. Good milk, he stated, contained from 3 to 6 per cent. of fats, and the poorest 2.5 per cent. Mr. Fraser (examined by Mr. MacSheehy) in the case of James Cullen, produced the contract for the supply of milk to the house. On the 24th of July he obtained a sample from defendant's man, and told him he was going to have it analysed. He divided the sample into three parts, and left him one portion. He sent the sample to Sir Charles Cameron, from whom he received the certificate produced. The daily supply was sixty gallons. The man had two cans, one containing twenty gallons, and it was from that the sample was taken. Mr. Fraser was also examined in the case of N. Hughes, whose daily supply was seventy gallons. Mr. Keogh contended that these were not cases of adulteration under the Act. There was no addition of anything, which constituted adulteration under the Act. Mr. MacSheehy submitted that the case was fully proved, and said he dared the defendants to appeal. The Magistrate imposed a penalty of £10 in each case.

UN SOUND MEAT.

John William May, carrying on business at 97, Charterhouse-street, Smithfield, was summoned by Inspector Thomas, Sanitary Inspector, Bermondsey, for selling meat unfit for human food; and Robert Adams was brought before the Court for exposing the same meat for sale on a stall in the Bermondsey New-road. Mr. Swann and Mr. Calvert were counsel for the defence. On the part of the prosecution it was alleged that the last-named defendant had exposed for sale a large lot of beef joints which were totally unfit for food. According to the evidence of Assistant Inspector Iles the meat was so bad that the smell of it "gave him the colic." It was stated by Adams that he purchased the meat from the other defendant, and paid for it at the rate of 1½d. per lb. It looked quite fresh when he bought it, and he did not know it was diseased. Inspector Iles said the meat was fresh but had a peculiar odour of physis, showing that the animal was diseased before it was slaughtered. Both defendants, by advice of their counsel, elected to go before a jury, and they were accordingly committed for trial at the London sessions, bail being allowed.

MARKET REPORTS.

LONDON, SUGAR.—Trade is brisk in British refined, and good prices are obtainable. Pieces are in demand at full rates. Crystals steady; and dried goods show a good trade. Quotations as follows:—Tate's No. 1 cubes, 22s; No. 2, 21s 6d; crushed, 20s 6d; seconds, ditto, 20s; Martineau's pulverized, 20s 3d; granulated, 20s; white crystals, 21s, 20s 6d, and 20s; yellow, 18s; golden syrups, 14s 6d, 10s, 8s 6d, and 8s; Lyle's granulated, 20s; yellow crystallized, O and P, 18s 8d; R, 17s 9d. Crystals—No. 1, 20s 6d; No. 3, 19s 6d. Fowler's golden syrup, 14s. Foreign refined and moderate trade at steady rates. Granulated, ready S P R on sample, sold at 18s 6d; S T A B, 18s 7½d; October, new crop, 17s, value; November-December, S T A B, Z H F M S, R A V, and E C H, sellers' option, sold at 16s 4½d, and since S T A R, 16s 6d, f.o.b. Hamburg; cubes, S and T, September, 20s, f.o.b. Amsterdam; F M S, September, 19s 9d; f.o.b. Hamburg. Crushed steady, Dutch, A S B, super, prompt, sold at 18s 4½d to 18s 6d; out loaf, 20s; and loaves, 18s. 9d, f.o.b. Amsterdam; Austrian, T T D and V, November-December, 16s 6d, sellers, f.o.b. Hamburg. French crystals easier. Super 3's sold at 17s 4½d to 17s 3d, cif; Lebeaudy's fine granulated, 18s 7½d; uncoloured mineral water, 18s 4½d; cubes, 19s 9d; Say's loaves, September, 19s; cubes, 20s., sellers, f.o.b. Paris. Cane sorts steady but quiet. 500 bags crystallized Demerara and Trinidad low yellow sold at 19s to 19s 3d. Messrs Arbuthnot, Latham and Co's telegram, dated Mauritius, August 27, reports:—"Sugars find buyers as fast as they arrive in town. Bombay whites are in good demand at Rs 14 per 50 kilos. Freight and exchange markets practically unchanged. Beetroot, influenced by lower Continental quotations, opened easier and declined ¾d to 1½d. Trade was moderate, say 3,000 to 4,000 tons, and comprised 500 tons ready at 14s 6d, 150 tons at 5½d, also 6d. less ½ and less ¼; September, 14s 4½d; October, 14s less ½, 14s net, 14s plus ½, plus ¼ and less ¼; November, 13s 9d plus ½; November-December, 13s 10½d and plus ½; and January-March, 14s 1½d less ½ and net. The close showed sellers and buyers as follows:—September, 14s 5½d and 4½d; October, 14s plus ½ and net; November-December, 13s 10½d plus ½ and net; and January-March, 14s 1½d, value. Contracts registered for 15,000 bags. Stock in Hamburg, 14,600 tons, against 22,700 last week and 36,100 tons a year ago.

CORK BUTTER.—Choice descriptions were again in buyers' favour, while inferior qualities continue to advance in price. The tone of the market is firm, and there was an active demand in all departments. Quotations:—Mild cured superfine firkins, 113s.; fine mild, 108s; mild, 101s; ordinary, firsts, 101s; seconds, 97s; thirds, 93s; fourths, 72s. Number of firkins in market 858, of which 353 were firsts and 100 superfine.

FOREIGN BUTTERS.—Friesland comes unchanged from the Sneek market and has a dull tone, the high prices still hindering business. Normandy is steady, although less active at 126s to 128s for best ordinary baskets. Danish is firm on short supplies, with fine to choice at 128s to 130s.

CHEESE.—At London American remains very quiet, but the tone is steady, with prices unchanged. Canadian, 47s to 48s; States, 45 to 46s. Dutch is also steady, with, however, a limited business at 52s to 56s for Edams, and 47s to 52s for Goudas.

At Glasgow the arrivals of Scotch cheese have been light, but with rather more selling going on, overlying stocks are getting reduced. The demand is still chiefly on fancy parcels, for which prices are firm, but medium and lower grades are 1s to 3s lower. Fancy Cheddars, 58s to 61s; medium Cheddars and Dunlops, 48s to 55s. There have been free arrivals of American cheese, but the market on this side continues very slow, though prices are firm without change—viz., finest coloured cheese, 47s to 48s; finest white, 46s to 47s per cwt.

LARD.—American on the spot is quoted 48s for pails, and 44s 3d to 45s for prompt shipment, c.i.f. London. Irish bladders offer at 50s to 61s for Belfast makes, all sizes, and Waterford kegs are quoted f.o.b at 54s to 55s.

BACON is rather upheld by the small supplies than by good buying, but sales to arrive are being made at late rates. Irish—lean sizable, 70s to 72s; stout and stout sizable, 69s to 71s; fat, 65s to 70s. Danish—No. 1 lean, 68s to 70s; No. 2, 66s to 69s; No. 3, 64s. to 67s.

HAMS.—In Irish the demand exceeds the supply, and the market is firm at 108s to 114s for prime Belfast cures. American are firm, with long cuts at 57s to 62s.

LIVERPOOL.—Bacon.—The market is again very firm, notwithstanding the increased shipments from the seaboard, but no advance in prices is obtainable, with the exception of short clear backs and clear bellies, both of which are in less compass and tend against purchasers. Shoulders are in fair demand, but holders are free sellers and values the turn in buyers' favour. Hams.—There is no quotable change in value, but, with holders meeting buyers freely, an easy tendency prevails. Lard on the spot is steady at unchanged prices, but only a moderate amount of business is going through. American refined steady at late rates. Cheese.—The demand is still a disappointing one; at the same time sellers are not disposed to accept less than recent currencies, which therefore remain unchanged. American butter presents nothing fresh to view. Eggs are quietly steady at unchanged figures. Margarine.—There is no change to report, prices keeping very firm. Beef firm, and held for full prices. Pork steady for best qualities, other sorts easy in tone.

COFFEE.—1,083 packages, and with a continued good demand nearly all sold at steady prices. Ceylon, common bold brownish to good bold blue, 99s to 107s; small to medium, 92s to 103; peaberry, 104s to 122s; triage, 86s to 90s. East Indian, common bold gray, 95s 6d to 99s 6d; small to medium, 82s to 94s 6d; peaberry, 98s 6d

to 103; triage, 81s 6d. Liberian, bold dull yellowish mixed, 85s; medium to peaberry, 65s 6d; triage, 57s. Guatemala, common to coloury peaberry, 98s 6d to 108s 6d; middling mottled gray, 91s 1d (London cleaned); good middling blue, 94s 6d to 98s 6d. Salvador, fine ordinary bright foxey greenish, 85s; peaberry, 93s 6d to 94s 6d; greenish to good gray peaberry, 93s to 106s. Columbian, ordinary very mixed, 78s 6d. Costa Rica, middling pale greenish, 91s 6d; middling dull greenish, 93s 6d. Futures steady, but quiet. About 2,500 bags Rio sold. December, 72s 6d; March, 71s 9d. Closing values—September, 73s; December, 72s 6d; March, 71s 9d; May, 71s 3d. Contracts registered for 3,500 bags Rio. Messrs. R. J. House and Co. give the European stocks on September 1 as 109,440 tons, against 109,900 the previous month, and 75,640 tons a year ago; and the world's visible supply 193,550 tons, against 181,910 and 161,590 tons respectively.

TEA.—comprised 3,417 packages of China, the bulk of which was withdrawn. A few Congous sold at easier prices and scented teas at steady rates; 14,000 packages Indian sold with more demand, especially for common grades, but prices tended in buyers' favour, while better and fine, which are scarce, brought slightly higher rates from 1s 4d to 2s 6½d; also 1,200 packages Java were disposed of at 5½d to 10½d being unchanged. Terminals steady with a moderate inquiry. China, October, sold at 5 3-16. Indian quoted 6½d. Contracts registered for 1,500 half-chests of China.

Rice remains very quiet in all positions.

TAPIoca.—Flake steady but quiet, and of 1,245 bags in auction only 65 sold—dull grayish Penang, 1½d. For arrival firmer; about 100 tons Singapore, September-November, steamer, sold at 1 7-16d. landed terms. Pearl dull, and of 1,355 bags only 18 bags damaged sold.

IF YOU SELL A GENUINE ARTICLE

LET THE PUBLIC AND THE TRADE KNOW IT. ADVERTISE IT IN "FOOD AND SANITATION."

Retail Traders study FOOD AND SANITATION to know what Food Stuff they can sell without risk of prosecution.

The Grocer who does not subscribe to FOOD AND SANITATION, places himself at the mercy of unscrupulous wholesale dealers. FOOD AND SANITATION costs only 6s. 6d. yearly, post free, and has saved its readers from many prosecutions. Send on your 6s. 6d. at once, and begin with the New Volume.

Subscribers should address, PUBLISHER,

"FOOD AND SANITATION," 183, Strand, London, W.C.

SPECIAL NOTICE TO SUBSCRIBERS.

Subscribers are requested to note that Yearly Subscriptions are now due, and should be forwarded forthwith. Back numbers of the Journal, 3d. per copy. Vol. I., containing the first 26 numbers, may be had bound in cloth and gold lettered at 7s. 6d. per volume. Index to Vols. I. and II., price 1s. Subscribers requiring Index will oblige by communicating with the Publisher.

FOOD AND SANITATION has over 20,000 readers: Manufacturers, Merchants, Wholesale and Retail Traders, Grocers and Provision Dealers, Dairy Farmers, Produce Merchants and Bacon Curers, Pure Beer Brewers, Distillers, Fruit Growers, Agriculturists, Medical Practitioners, Public Analysts, Food and Drugs Act Inspectors, Sanitary Inspectors, Town and County Council Clerks, and Medical Officers of Health.

To the PUBLISHER,

"FOOD AND SANITATION,"

183, Strand, W.C.

Please forward me a copy of "FOOD AND SANITATION," weekly, for twelve months, for which I enclose Six Shillings and Sixpence.

Name _____

Address _____

Date _____

SICILIAN WINE VINEGAR,

GUARANTEED ABSOLUTELY PURE.

The purest of Vinegars; guaranteed to stand any Analytical test; pure from start to finish; needing no distillation, but a natural unsophisticated product, ensuring perfect digestion not possible in the various manufactured Acetic Compounds.

To be obtained of all the principal Grocery Establishments and Stores.

Write for Samples and Prices to

READ & DIGHT, Sole Proprietors, 72, Mark Lane, London, E.C.

Chafed Skin, Piles, Sores, Chilblains, Chapped Hands, Neuralgia and Rheumatic Pains, Sore Eyes, Ear-ache, Cuts, Sunburn, Insect Bites or Stings, Throat Colds, and Skin Ailments quickly relieved by use of

CALVERT'S CARBOLIC OINTMENT,

Large Pots, 13d. each, with full Instructions.

Court Circular says: "We cannot too highly recommend Calvert's Ointment. It is the best general Ointment with which we are familiar, and ought to be a stock remedy in every household."

Private report from Limassol Cyprus: "I have never found anything to come up to it for neuralgic 'Rheumatic Pains.'"

Samples sent Free by Post on receipt of value.

F. C. CALVERT & CO, MANCHESTER.
Awarded 60 Gold and Silver Medals and Diplomas.

FOOD & SANITATION,

THE ANTI-ADULTERATION JOURNAL;

A NEWSPAPER TO SUPPORT ENGLISH, IRISH,
SCOTCH AND WELSH INDUSTRIES,
AND TO SUPPRESS

FOREIGN FREE FRAUD IN ALL IMPORTED
ARTICLES.

A Journal for Manufacturers, Merchants,
Wholesale and Retail Traders, Grocers
and Provision Dealers, Dairy Farmers,
English and Irish Produce
Merchants and Bacon Curers,
Pure Beer Brewers, Dis-
tillers, Fruit Growers,

AND
Agriculturists.

PUBLISHED WEEKLY

BY

M. HENRY, at 183, STRAND, LONDON, W.C.

SUBSCRIPTION: PER ANNUM, POST FREE, 6s. 6d.

THE ENEMIES OF ENGLISH TRADE.

THE Trades Union Congress, at Belfast, did one sensible thing at least by resolving:—

"That a conference be held in London in November next, consisting of the Parliamentary Committee and trades interested in the Merchandise Marks Act, for the purpose of thoroughly discussing the provisions of the Bill and devising the best means of urging the Government to amend the same."

This resolution shows, we hope, that Trades' Unionists are disposed to "cut the cackle and come to the osses;" that vapourings no longer satisfy them; that they want to get at the actual causes of scanty work and scantier pay for English working men and women.

We are rejoiced to see this evidence of sober sense in the deliberations of the representatives of the toiling millions. Such a conference can do nought but good, but to be really serviceable it must be thorough and practical, be no respecter of persons, traditions, or institutions, and be in earnest. It was said in the Crimea that our soldiers were lions led by asses. In trade we are a nation inferior to none in the world, but of what avail is that when at every step we are confronted by Government asses, each fattening upon the merchant, the manufacturer and the labourer, but returning, in place of gratitude and useful service, contempt and stubborn resolve to treat the English industrial community as slaves in place of masters. Let us take as a type that representative official, the Right Hon. A. J. Mundella, President of the Board of Trade. It is within his province to enforce the Merchandise Marks Acts, and he receives from the public money chest £2,000 per year, for, we presume, doing work of some sort. Altogether Mr. Mundella and his subordinates swallow £74,000 per year for looking after English trade. How has this expensive Board treated English trade and traders? As every trader knows, with studied insolence. Traders have had to approach it in fear and trembling, and unless backed by influential introductions their complaints

have not even been listened to. Six or seven prosecutions for offences against the Merchandise Marks Act have been the total work done by the Board of Trade, and these required tireless energy on the part of trade associations before the Board of Trade would touch them. Cholera has now got a footing in England. Some seven or eight months ago we exposed a swindling carbolic powder that contained no carbolic, and the use of which caused fifty outbreaks of typhoid and five deaths in Derbyshire, and with infinite trouble the makers of this murderous swindle were discovered. The Food and Drugs Act provisions would not apply to disinfectants, or a prosecution would have quickly taken place. The facts were in consequence placed before the Board of Trade. What has that department done to punish the rascals who thus practically murdered five human beings and caused fifty others to have dangerous illnesses? Nothing whatever. They may have put some red tape round the papers relating to it and handed it from one idle loafer to another, but whilst this tomfoolery was being enacted the makers of the murderous swindle quietly dissolved partnership, removed from the district where they manufactured the spurious carbolic, and for aught the Board of Trade knows or cares, may be now supplying panic stricken people in Hull or Grimsby with the same class of disinfectants with which to fight cholera. Irish and English bacon curing would employ thousands of workmen, but for the fact that American bacon is everywhere branded as English or Irish and sold as such to the detriment of the public and the throwing out of work of those engaged in that industry. What have the Board of Trade done to remedy this plunder of the public and its attendant colossal injury to English and Irish trade? Again, nothing whatever. Mr. Mundella may say he has no power, that the Act is imperfect, or advance the thousand and one excuses ever on the lips of those who make politics a trade, but no Minister worth his salt would entrench himself behind such wretched pleas. If he and his subordinates have not the power to enforce the Acts, it is Mr. Mundella's duty to tell Parliament so, and to ask for powers to punish such frauds, and give fair play to native industries. The British cigar industry affords another illustration of the amount of regard Government departments pay to traders:—

Mr. Gilliatt, M.P., presided over a meeting of the members of the Tobacco Trades' Section of the London Chamber of Commerce, to receive the report of the action taken by the manufacturers' committee in regard to stoppage on cigars, and to determine what further action should be taken. Mr. Wright explained that the Act of 1863 did not allow any drawback on cigars where the inorganic matter contained was over 22 per cent. As a matter of fact that law had been allowed to sleep, but now the officials had refused to allow drawback. The result was to totally put an end to the exportation of British cigars, as the manufacturers stood no chance of competing with foreigners, and many firms were unable to complete orders. Tobacco leaf contained over 22 per cent. of inorganic matter, and therefore it was impossible to meet the requirements of the law. A lot of correspondence had passed between the committee and the Lords of the Treasury, but the latter stated their inability to do anything until the Customs and Inland Revenue Bill be brought into Parliament next year. After discussion, Mr. Gilliatt agreed to interview Sir John Hibbert, and lay the whole matter before him, and see if anything of a temporary nature could be done to meet the difficulty.

If there be a fact that is recognised by every trader it is, that whilst there is nothing easier than to kill a trade—as witness Sir Wm. V. Harcourt and Mr. Gladstone's admissions as to the manner in which unjust and stupid laws destroyed the Irish woollen and other industries—there is no harder task than to revive one that has been the victim of foolish legislation. The tide of commerce flows in other directions, and these engaged in the trade are dispersed. Now, if there lurks anywhere in the mammoth bulk of The Rt. Hon. Lineal-Descendant-of-the-Plantagenets-Harcourt who believes he honours England by taking from the public purse £5,000 per year salary, the capacity to grasp a truth—this—that the action of the Inland Revenue asses in disinterring a stupid law inimical to England, and using it with a ruthless disregard of its consequences, and of the fact that it throws an important English industry into the hands of foreigners, and thrusts English workmen out of employment, ought to be one that would force itself into the most pachydermatous official cerebrum and cerebellum as being monstrous and unpatriotic. But what does this Rt. Hon. gentleman do? He says:—"I have satisfied myself that some amendment of the law is desirable in the interests of the trade, and in the next suitable bill a clause will be inserted legalizing the grant of a reduced amount of drawback in such cases. Pending such legislation, I have no power to suspend the operation of the Act."

There is only one plain Saxon word that fully applies to the statement of Sir Wm. V. Harcourt, and our readers may guess it. He knows perfectly well that he has the power to save this British industry from extinction. He knows that one word from him would cause that unjust and foolish Act to be left to sleep as it slept for years, until some idiot of a "Tito Barnacle" stumbled across it, and chuckled to himself as he saw how he

could flout and harass traders who are taxed to support his mischievous existence. Why does not Sir Wm. V. Harcourt say that word? Because he is a politician, tied to official formulæ, moved not by principles or common sense, but by votes. If the working men of Derby were to meet and inform the Chancellor of the Exchequer that if he does not at once stop this crime against English trade they will revenge his folly or carelessness upon him at the ballot box, he would promptly discover a method of stopping the exercise of this Inland Revenue idiocy, for it is not principles that affect politicians, but votes and the possible loss of place, power, and £80 per week would affect this political huckster more than all the whispered humbleness of Mr. Gilliat, M.P., and his friends the cigar manufacturers. But this is not a hundredth part of the crimes our Government departments have committed against English workmen, who should remember the department responsible for this throttling of English trade and throwing workmen out of employment, is the Board of Inland Revenue, that swallows one million seven hundred and eighty four thousand pounds of public money. What public service has this department done for so huge a sum of money? It has truckled to the swindling brewer, who thanks to it, may make his beer of road sweepings if he pleases. It has favoured the swindling distiller who, thanks to it, may bottle German potato spirit and call it Irish or Scotch Whisky. It has increased the use of sugar, which we do not produce by 500,000 cwts. in breweries and distilleries, but English and Irish barley, which we do produce, and which would employ thousands of English and Irish labourers has, thanks to this department, decreased by 500,000 acres since Mr. Gladstone's abolition of the malt tax. English workmen have many enemies, but their worst are the English Government departments. We are glad, therefore, to see the trades unions take up this Merchandise Marks question, and hope that some of their members may take the trouble to thoroughly understand and place it succinctly before the conference. It is, again, we insist, not principles but votes that concern our political hucksters, and a possible loss of a few hundred to Mr. Mundella at Sheffield or Mr. Harcourt at Derby, would move these gentlemen more than any other power in the world.

WATER IN BUTTER.

GROCERS SHOULD NOTE THIS.

One of the easiest of frauds, and, in its effects, the most damaging to the Irish butter industry, has been that of excess water in butter. We have repeatedly shown by the evidence of thousands of analyses, that the amount of water in butter ought not to exceed twelve per cent., any percentage over that amount being to the prejudice of the purchaser, and left in the butter either by carelessness or by fraudulent design. It has taken us a long time to force this home to the attention of Irish butter factors and of retailers. We see that in some cases at Ennis sixteen per cent. of water has been taken as the limit. It is the interest of retailers to oppose this, and to demand that the butters they buy shall not exceed twelve per cent. of water, because they, even more than the public, are swindled by the practice. Retailers should remember that the water that swamps their butter counters has all been purchased by them as butter, and paid for at butter price. They cannot vend it to the public as butter at butter rates, and it is just in these unnoticed leakages that the grocer loses five or ten per cent. of what ought to be profit for his hard work. Yet the retailers who have grasped the artful significance of this fraud are very few. There is just now another effort being made to establish Co-operative Stores in London. It is only a few months since we proved that the colossal English society, by its own admissions, purchased a special butter made for them containing 20 per cent. of water, and that they sold £500,000 worth of it to their members. This butter contained eight per cent. more water than butter ought to have, and the amount practically filched from the members of the co-operative society by this arrangement was some £40,000 per year in one item alone. For the genuine co-operative ideal, that of Hughes, Holyoake, Maurice, Neale and Kingsley, we have every respect, but for mean filchings of this character we can have no feeling other than that of hearty contempt, and the hope that these pseudo philanthropists will be hauled before the courts for the fraud. Irish butter has a great future before it, but it must be honestly made, and be of that high quality the public now expect. It is therefore gratifying to find that Food and Drugs Act Inspectors in Ireland are grappling earnestly with the evil of excess water in butter, and we hope to see Inspector McHugh's action followed in every part of Ireland.

The following cases should serve as a warning to butter factors who have hitherto practiced the excess water game with impunity:—

At Ennis Petty Sessions, held on 11th August, 1893, before Mr. F. G. Hodder, R.M., who occupied the chair, and Messrs. H. de L. Willis, Thomas O'Gorman, J. W. Scott, and R. H. Crowe, Sergeant

John McHugh, Ennis, Inspector under the Food and Drugs Act, summoned John Hehir, Connolly, for having for sale at Ennis Market on the 1st July, butter adulterated by having an excessive proportion of water. The defendant was not professionally represented. Mr. Dunning briefly stated the case, and in reply to the Chairman, said the penalty was forty shillings. Sergeant McHugh said he was in the market on the 1st July, and he obtained a sample of butter from the defendant. He sent it on in the usual course to Sir Charles Cameron for analysis, and produced the certificate which he had received in return. This stated that in Sir Charles' opinion, the butter was adulterated by having 19·64 per cent. of water, which was an excessive and unnecessary quantity. Chairman: What is the normal quantity? Mr. Dunning replied that the standard of water had been fixed at 16 per cent. Chairman: What have you got to say? Defendant said he thought the butter was good, and he knew nothing more of it. The sample of the article retained by the Inspector having been viewed by the bench, the chairman imposed a fine of 40s. and costs.

Following this case, Sergeant McHugh prosecuted at Ennis Petty Sessions on September 1st—

Edward Moroney, of Ballynashanna, Lissycasey, for having butter for sale at Ennis market on the 12th August, which was adulterated with 21·13 per cent. of water. The defendant was not professionally represented and he was fined 30s. and 10s. 6d. special costs. On a similar charge against John McMahon, of Ballytigue, Ruan, a fine of 10s. and costs was imposed. In his case the percentage of water was 18·88 per cent.

This is a practical and praiseworthy way of protecting the public and raising Irish butter to a high standard of repute. Grocers also who have been heavy losers by excess water oozing from their butters, will note with satisfaction this action at Ennis and we hope that other Food and Drugs Act Inspectors will go and do likewise.

THE HOUSE OF COMMONS & ADULTERATION.

ON the 9th inst., Mr. Hanbury, in Committee of Supply, brought before the House of Commons the important question of Adulteration in imported food stuffs. If there exists in the British Isles one man, woman or child who is not imbued with a thorough contempt for the poor creatures who call themselves Right Honourables and Honourables, we recommend that person to read the report of the few minutes' debate given to this most important question. If there be one merchant, manufacturer, dairy-farmer, or harassed agriculturist, who thinks he can rest easy under promises that Parliament means to do some useful work for any British industry, we recommend to him the frank admission of Mr. T. Gibson Bowles, M.P. for King's Lynn,—that "He was utterly ignorant of the subject under discussion,"—and yet that subject is one meaning bread and work to thousands of English, Irish, Scotch and Welsh men, women and children. Had it been some ridiculous rubbish—the latest tit bit of Vanity Fair twaddle, or the precise point at which the puff of my lady's sleeve should begin, the Hon. Gentleman would be able to talk or write oceans of drivel upon it, but as it is only a question affecting English trade—a mere demand to give English industries fair play against Foreign Free Fraud, and to do for dairy-farming in England what Denmark has done—it has no charms for that hon. gentleman, and we must frankly admit that Mr. T. Gibson Bowles' admission does not astonish us. If the six hundred and fifty odd Right Honourables and Honourables—mostly fools—who play in Parliament at humbugging England, were by any chance to be capable of a moment's frankness, they would each have to say with the Hon. King's Lynn Member of Parliament, that they were "utterly ignorant of the subject under discussion." If the Right Hon. President of the Board of Trade, and his colleagues of the Local Government Board and the Board of Agriculture, who between them cut up £6,000 per year of the taxes levied upon the trade of England were to tell the truth, they also would have to say that they are "utterly ignorant of the subject under discussion," and do not burn with zeal to be enlightened. Adulteration in imported food and other stuffs only represents a few millions per year plundered from the English people, and the wiping out of one English industry after another. It has nothing to do with "flags," and "rallying," and "voting solid," and "programmes," and like tomfoolery. It only explains why Englishmen starve in England; how by the incapacity of Somerset House chemists English and Irish butters are thrust from our markets by adulterated foreign butters, which Somerset House chemists pretend to analyse and cannot. It is only a *real* question affecting home industries. It is not Anti-Vivisection, Anti-Vaccination, or the conversion to some ism of a host of foreign filthy niggers. Were it such, it would get enthusiasts from both sides of the House of Commons to look upon it as a worthy question, but being practical, sensible, and useful, all it obtains is just a few minutes' consideration by people who do not understand it, whilst the few Right Hon. and Hon. Gentlemen who do know a bit about it, who have waxed wealthy and fat by making a concoction of inferior mustard and some colouring matter, and ten per cent. of flour, and selling it as mustard, or by skimming

milk of its fat, dosing it with sugar and selling the indigestible innutritious trash for infant's feeding, to the great increase in infant mortality, or the Hon. Gentlemen who in their shops sell margarine as butter, or in their Irish bacon factories smoke and cut American bacon and brand and sell it as Irish, lay low and rejoice that we have a House of Commons of Gibson Bowleses. Of a truth our legislators are honourable men, all honourable men—as was Spencer Balfour, Hastings, De Cobain, Verney, etc., until—well—until they were found out; but it gravels us to have such evidence as this, that England's House of Commons contains so few real Englishmen, and so many—we may as well write the full truth, shameful though it be to us as a nation—blockheads.

ROTTEN FOOD AND ROTTEN LAW.

Mr. Anscombe, the St. George-the-Martyr Sanitary Inspector, merits the thanks of the public for affording our law-makers a glaring exhibition of their folly.

At the Southwark Police-court, on September 8th, Mr. Anscombe applied to Mr. Slade for a condemnation order for certain herrings he had seized at a fish curer's in Tabard-street, Borough. The Officer said there were some eighty-five barrels of herrings in a putrid state, and in such a condition as to be absolutely dangerous to health and he thought the better course would be for his worship to visit the premises and inspect them. Mr. Coates, the Clerk (to the Magistrate): You can't do that, sir; they must be brought here. Mr. Anscombe: If I bring them through the streets I shall not only be endangering health, but I shall be committing an offence under the Public Health Act. If your worship will not inspect the herrings on the premises, will you let me bring a sample? Mr. Coates: No Sir; he must bring them all here. Mr. Anscombe: It will take a long time to bring them here, there must be five or six vans. It would be very dangerous. I shall have to bring them through a very densely-populated neighbourhood. Mr. Coates: They must be brought here. Mr. Anscombe: They come from Grimsby, where, as your worship is doubtless aware, that cholera is raging. Mr. Coates: They must be brought here. Later in the afternoon five large mud carts belonging to the Vestry were drawn up outside the court, having been loaded with the fish and drawn through the Borough. The smell was horrible in the extreme, and said to be by several Vestry officials highly dangerous to health. Mr. Slade then inspected the herrings, and promptly made an order for their destruction. After being sworn, the Inspector said when he made the seizure he found that some 20,000 of the herrings had been smoked, and he had little doubt that if he had been an hour later they would all have been placed on the market.

We notice that Mr. E. H. Pickersgill, M.P., disputes the dictum of the Southwark Police-court Clerk, contending that under sub-section 2 of section 47 of the Public Health (London) Act, 1891, "seizure" is not a condition precedent to "condemnation," and that it is sufficient if the subject matter is "liable to seizure." Mr. Asquith, however, who may reasonably be supposed to know the law better than Mr. Pickersgill, does not quarrel with the magistrate's dictum, but says:—

"The magistrate informs me that in his view of the law he has only power to condemn what he has actually seen himself. If this be so the law is, in my opinion, in an unsatisfactory state, and I will consider whether legislation is necessary."

So that it is perhaps not worth while to take Mr. Pickersgill's little bit of self-laudation seriously. Now that Mr. Anscombe's timely action is like to have the law as to seizure overhauled, it were well that some other dangerous and asinine peculiarities in that law should be made public. The following case occurred only last year. Dr. Louis Parkes, Medical Officer of Health, Chelsea, applied to Mr. Shiel at the Westminster Police-court, and requested him to condemn 142 lbs. of beef as unfit for human food. The meat had been supplied that morning to the St. George's Union Workhouse Infirmary for sick paupers by the contract butchers. Dr. Parkes testified on oath that the meat was beginning to decompose, was of very bad quality, and could not be used for beef tea or in any way for food. Mr. Shiel, the Magistrate, examined the meat, some of which was turning green. He said it looked very nasty indeed, but as the matter stood he could not make an order, as there was a *legal difficulty*, *the meat not having been exposed for sale*: whereupon the workhouse officials took the meat away.

But this instance of Mr. Shiel and rotten meat pales into insignificance when compared with some of the rulings of those legal curiosities, Justices Day and Lawrence. As recently as April, 1891, these judges decided that the decision of a Magistrate who had convicted a person of exposing diseased meat for sale was faulty, as the meat was merely *deposited* and not exposed by *lying up*. Could folly further go? In the face of such decisions as these, it is very evident that there is something wrong with the law or the mental fitness of some of our magistrates and judges. We have shown in our columns weekly how the law can be a "mass." At last, thanks to Mr. Anscombe, there is a chance of a law of its dangerous absurdities being remedied.

ADULTERATION AND SOMERSET HOUSE IN THE HOUSE OF COMMONS.

In Committee of Supply, on September 9th, Mr. Hanbury complained that the Board of Agriculture had not sufficient powers for the protection of the makers of butter in this country. The President of the Board of Agriculture had no control whatever over the importation of adulterated butter. The matter was entirely in the hands of the Board of Trade. The only headings in the Customs statistics were butter and lard; but there were many articles which came between these two. Something should be done to inform them to what extent importers adulterated their butter with margarine, and when that adulteration exceeded, say, 15 per cent. they ought to be obliged to state the fact in their bills of lading, for adulterated butter did even more mischief than margarine itself. Then there was no protection against the adulteration of butter inland. The whole control rested with the Local Government Board, and under that Board was exercised by the local authorities, who administered their powers very loosely. The result was that the English dairies farmers had to encounter most unfair competition. It was monstrous that with regard to a matter affecting so large a portion of the farming interest the President of the Board of Agriculture should have no power to give protection against this very serious and unfair competition. In the few cases in which the retail dealers were prosecuted they very often escaped on the plea that the adulterated article was supplied by the wholesale dealer; and the prosecution was not carried further. Not only should these matters be placed under the control of the Board of Agriculture, but that Board ought to have an Analyst of its own. At present analyses were made at Somerset House, and everybody had complained with regard, not only to butter, but to milk and other articles, that Dr. Bell allowed a percentage of adulteration that was perfectly absurd. Dairy farming was becoming most important, and all such matters ought to be under the control of the Board of Agriculture. France, Sweden, and other foreign countries were doing everything in their power to protect their dairy interests, and the large importation of Danish butter was especially due to the great interest shown in regard to dairy produce by the Board of Agriculture of Denmark. Mr. Jasper More suggested that the reports of the Board of Agriculture should be more largely circulated than they were. Sir M. Hicks Beach complained that no steps had been taken to give effect to the recommendations of the Tithe Commission, and he hoped the Minister of Agriculture early next Session would introduce a measure dealing with the subject. Mr. A. C. Morton asked if the Right Hon. gentleman would give them some information with regard to the Agricultural Holdings Act and the Small Holdings Act. Mr. Gardner thanked Hon. and Right Hon. gentlemen opposite for the invaluable kindness and consideration which he had received from them since he had had control of the Agricultural Department. As the House was aware, the Royal Commission on Agriculture was about to be appointed, and he thought that on that ground there were several questions, such as the Agricultural Holdings Act, to which he was not called upon to reply as they would be dealt with in the report of that commission. *So far as the importation of adulterated butter was concerned he had no power to interfere with it.* The importation of Canadian cattle had been dealt with at some length this Session, and he was bound to say that in such a matter as that he must be guided by his veterinary advisers, and that he could not run the risk of opening the ports to infected cattle. The hon. member for St. Pancras had raised the question of glanders, but as nine-tenths of the cases of glanders arose in the metropolitan area they would have to charge the County Council with the enormous cost of compensating the owners for the horses destroyed. He did not think the London representatives would assent to that proposal.

After some further discussion,

Mr. Gibson Bowles said he was utterly ignorant of the subject under discussion. It appeared that the right hon. gentleman had no power to deal with the importation of adulterated butter.

The Chancellor of the Exchequer: I beg, Sir, to move that the question be now put.

And put it was. It did not strike any right hon. or hon. gentleman that there should be power to deal with adulteration in imported butters, and the right hon. and hon. twaddlers dispersed quite satisfied with their efforts for England and its dairy farming.

BAD MEAT AT SOUTHPORT.

At the Liverpool Police-court, on September 6th, Wm. Lockett, of Crossens, near Southport, was fined £20 and costs for having deposited for sale in a slaughter-house at Birkenhead, Southport, a carcase of a cow which was diseased and unfit for human food. Is it not time this disgraceful Southport Corporation stirred itself to put the Adulteration Acts in force?

TRADE OUTINGS.

On Saturday, September 2nd, Thomas Woods employes in London and Swanley Factories, were taken by special train to Margate for the Annual Excursion. A capital dinner was provided and thoroughly appreciated. The train left St. Paul's at 7.40 a.m. with the London employes (confectionery) and called at Swanley for the jam factory employes at 8.15, arriving at Margate at 10 o'clock. They were favoured with splendid weather, and when the party left Margate for the return journey at 7.45 p.m. they were unanimous in declaring it had been a most enjoyable outing.

ADULTERATION PROSECUTIONS.

BAKING-POWDER.

At the Llantrissant Police-court, on September 8th, before Messrs. Evan John and Godfrey Clark, Supt. Jones, Pontypridd, summoned Mr. John Hiscocks, grocer, Brynsadler, for selling adulterated baking-powder on the 28th of July last. The baking-powder when analysed was found to contain 60 per cent. of alum, 26 per cent. of bi-carbonate of soda, and 14 per cent. of rice starch. Defendant said he was under the impression that he was selling a wholesome article. The Analyst's report stated that in this case the alum was not neutralised by the bi-carbonate of soda, but went straight into the stomach. The Bench, believing the defendant's story, only fined him £1 and costs.

SLENDER AND SWALLOW AGAIN.

At the Dartford Petty Session, on September 2nd, Mr. Amos Penney, grocer and provision merchant, of Galley Hill, Swanscombe, was summoned for selling adulterated baking-powder. Police Constable Kewell said he bought a dozen packets of Norfolk baking-powder at the defendant's shop. The County Analyst certified that the baking-powder contained 30 parts per cent. of alum; butter, vinegar and other goods purchased at the same time were found to be pure. Mr. C. C. Ridley, for the defence, pointed out that the summons was taken out under the sixth section of the Food and Drugs Act, and there was no evidence on which the Bench could convict, baking-powder not being an article of food, though if it were there was nothing done to the baking-powder in question which made it otherwise than that which it was represented to be. The chairman said alum was considered injurious in bread. Mr. Ridley said that was admitted, but the cases were quite distinct. Alum used with bad flour having a totally different operation to what it had when used in baking-powder. As to alum being an article of food he referred the Magistrates to the case *Warren v. Phillips* decided by Mr. W. Bulwer, Recorder of Cambridge, it being held in that case that baking-powder was not an article of food. That decision had stood for eleven years, and he, Mr. Ridley, intended to rely upon it. There was no evidence whatever to show that the baking-powder was other than what it was represented to be, but if there had been such evidence he would remind the Court that they were summoned under the sixth section, and not under the third section of the Act which dealt with the mixing of injurious ingredients with articles of food. There was no recipe in the *Pharmacopœia* as to how baking-powder should be made, and there was, therefore, no legal standard in respect to its composition, anyone having a right to make baking-powder of what they pleased. His main contention, however, was that no matter what the ingredients were, baking-powder was not a food. The Chairman (Mr. Flowers Jackson) said the Magistrates with some reluctance were obliged to acknowledge Mr. Ridley's contention, and the summons would, therefore, be dismissed.

At the Harlesden Petty Sessions on September 7th, William Lewis, 1, Duddon-hill-lane, was summoned for selling baking-powder which was adulterated with 24 per cent. of alum. Mr. Watts, the Inspector under the Food and Drugs Act for the North-Western Division of Middlesex, deposed to entering the shop of the defendant and asking for four packets of baking-powder, which Mrs. Lewis served him with, and for which he paid 2d. He told her the purpose for which he wanted it, and divided it. The sample sent to the Analyst showed it was adulterated with 24 per cent. of potash alum. The packets had "Canadian Baking Powder" upon them. The shop was a very small one, and although it was a great hardship on the poor, he did not press for a heavy fine. Baking-powder ought to be made of tartaric acid and carbonate of soda. He understood that powder thus adulterated was very injurious to health. Mrs. Lewis said she was not aware that the powder was adulterated, and had sent back all she had left. Her trade was not a large one. The Bench, taking this into consideration, only fined her 1s. without costs.

BRANDY.

At Tregony Petty Sessions, on September 4th, Benjamin Dungey, landlord of the Ship Inn, Portloe, Verran, was charged with selling to Superintendent Philp, on the 7th ult. a pint and a gill of brandy, which was so diluted with water, that it was 42 degrees under proof and 16 more than permitted by law. Defendant admitted the offence and stated, in extenuation, that he was short of spirit at the time. The Bench characterised the case as a deliberate fraud, and fined defendant 30s. and costs.

COFFEE.

Richard Holloway, general-shop keeper, having a branch business at Chatham-hill, was summoned for selling adulterated coffee. Defendant pleaded guilty. Superintendent Lacy deposed that a quantity of coffee was purchased from defendant's shop and submitted to Dr. Adams, the County Analyst who certified that it contained sixty-eight parts coffee and thirty-two parts chicory. Defendant stated that people asked for "shilling coffee." It was impossible to sell pure coffee at that price. Major Budden: Then you must tell people so. You will have to pay a fine of 20s., and 10s. costs. Defendant drew the attention of the Bench to two cases where much smaller penalties had been imposed in more serious cases. Mr. Rosher: We cannot be guided by other courts—we have the law before us.

At Aberdare, on August 29th, Thomas Mills, for adulterating coffee with 50 per cent. of chicory, was fined £1 and costs.

George Cooper, Pilsley, was charged at Clay Cross Petty Sessions, on August 6th, with selling coffee which contained 50 per cent. of chicory, and was fined 1s., and 8s. 6d. costs.

VINEGAR.

At Clay Cross Petty Sessions, on August 6th, William Wallwin, grocer, of Pilsley, was summoned for selling vinegar not of the nature and quality demanded. It appeared that the defendant supplied the Inspector with a pint of vinegar which, on analysis, proved to be acetic acid from the distillation of wood, also containing sulphuric acid, not of the nature and quality demanded by the Inspector, and did not answer the description of vinegar. Mr. A. H. Allen, Analyst, of Sheffield, and Dr. Barwise, Medical Officer of the Derbyshire County Council, also gave evidence for the prosecution. Fined 1s., and £2 4s. costs.—Grace Brazenhall, of Pilsley, was also summoned for selling vinegar which, on analysis, appeared to have been adulterated by an admixture of one-third water. To pay 25s., including costs.

At the Swansea Police-court, on September 7th, Clement Scott, grocer, Western-street, was summoned for selling vinegar which was not of the nature and quality demanded—that is to say, that the said vinegar contained 6 per cent. genuine vinegar and the remaining 94 per cent. diluted pyroligneous acid. Mr. Herbert Morgan prosecuted, and Mr. J. Viner Leeder defended. In opening the case, Mr. Morgan alluded to statements made at a recent prosecution to the effect that pyroligneous acid was used in the manufacture of vinegar, and had been sold as such for a great many years past. He did not wish to cast any reflection upon the defendant, as he might have sold the article believing it to be genuine vinegar. In fact, he was only technically the defendant. Sergeant Barnett gave evidence as to the purchase, and Dr. Morgan, Public Analyst, proved his certificate. The latter explained that pyroligneous acid was produced from the destructive distillation of wood, principally oak; whilst vinegar, as laid down by the *British Pharmacopœia*, was an acetous fermentation of malt and unmalted grain. In answer to Mr. Monger, the Analyst stated that the production of pyroligneous acid was about half as cheap as that of vinegar. Mr. Leeder: How do you suggest, Dr. Morgan, that a shopkeeper can test the article so as to know what he is selling? Dr. Morgan replied that the shopkeeper could only protect himself by obtaining a guarantee from the wholesale dealer. Mr. Leeder, for the defence, said he practically admitted the offence, but submitted, in mitigation, that it was one of ignorance more than anything else, as defendant sold the vinegar precisely as he bought it. He suggested that, before they came down upon small tradesmen, as in the present instance, some notice or other should be sent round to different tradesmen informing them that pyroligneous acid was being sold as vinegar. In concluding, Mr. Leeder asked Dr. Morgan if he would be satisfied if a label with the words "vinegar and pyroligneous acid" were placed upon the cask containing the article. Dr. Morgan replied that that was a question for the Bench to decide. The learned Stipendiary, on being appealed to, said he should think that course would protect the seller. In giving judgment the learned Stipendiary said he was glad there was no suggestion of fraud in the case. He was satisfied that pyroligneous acid was not vinegar, but he would only impose the nominal fine of 5s. and costs.

At the Alnwick Petty Sessions, on September 2nd, Mr. Joseph Watson, grocer, was charged with selling as malt vinegar a liquid consisting of dilute acetic acid. A certificate was produced from the County Analyst, Mr. Pattinson, Newcastle, stating that the sample contained no malt, but was dilute acetic acid. Mr. Percy, solicitor for the defendant, disputed the accuracy of the certificate, and said he was prepared to call Mr. Leslie Newbigin, pharmaceutical chemist, a well known local Analyst who would testify to the existence of malt, and whose evidence could be supported by the analyses of several well-known Analysts. The case was ultimately fought on the question of a warranty, evidence being given by Mr. Davison, of Messrs. Davison and Pickering, Newcastle, to the effect that he had bought the vinegar in question from a French maker in Aix-la Chapelle as malt vinegar and had sold it to defendant as such, attaching to the barrel a card marked "Malt vinegar." Mr. Alderson, for the police, argued that this was not a sufficient warranty; that it was merely a statement. Mr. Percy, in reply, quoted from *Stone* a case in which the superior Court had overturned a decision of Magistrates who had decided that a description on a vessel of milk, "fresh new milk," was no warranty. The Bench dismissed the case on the ground that a warranty had been given, and at request of Mr. Alderson agreed to state a case.

BUTTER.

At the Rochester County Police-court, on September 5th, Thomas Hill, grocer, New Brompton, was charged on summons with having unlawfully, on July 31st, sold to Superintendent Lacy and to his prejudice certain butter which was not of the quality and substance demanded by the purchaser. Defendant pleaded not guilty to this and also to a further information charging him with having infringed the provisions of the *Margarine Act* by selling a pound of margarine without its being wrapped in a paper and delivered marked as such, and that he had exposed margarine for sale without having had a conspicuously displayed label "margarine" upon it. Mr. F. A. Stigant appeared for the defendant, and, after some discussion, Superintendent Lacy consented to withdraw the first charge upon the defendant admitting the second, as the offence was practically the same. Superintendent Lacy proved the division of the goods purchased and the submission of one-third part to the County Analyst (Dr. Adams, of Maidstone), whose certificate showed that the sample of butter contained eighty-eight

parts of foreign fat and twelve parts of butter. It was a composition known as "margarine." By Mr. Stigant: The other goods purchased at the defendant's shop were certified as pure. He did not know where the butters usually stood, as that was the only time he had been in the defendant's shop. Mr. Stigant, for the defence, pointed out that a tradesman had a perfect right to sell this mixture of butter and "foreign fat," so long as it was not sold as butter, but as margarine. That it had been sold as butter on this occasion was quite an accident. The butters, &c., had been moved from their place on to the bacon counter in order to clean down, and the margarine label turned towards the butter, near to which it was standing, and the young man had served from the butterine in mistake for butter. Had it not been that the label was at the time in such a position as not to be conspicuous to the customer, he should have contended that the article was not sold to the prejudice of the Superintendent; but as it was, he had advised his client to admit the offence under the Margarine Act. Superintendent Lacy pointed out that it was also required that it be served in a printed wrapper labelled "margarine." Mr. Stigant, in further addressing the Bench, observed that his client was a son of the Vice-Chairman of the Medway Board of Guardians, and a highly respectable tradesman, anxious to conform to the law in every respect. He called the young man, Walter Lawson, to bear out his statement that it was a pure accident. By the Clerk: They had got real butter at 1s. per lb. The Bench fined defendant 10s. and 11s. costs, observing that they might have fined him £20. Mr. Stigant: But it would have been very hard to pay such a penalty for an accident. The Chairman: He must be more careful for the future. Defendant intimated that he had at all times done his best to conform to the law.

At the Bury Police-court, Messrs. Sutcliffe and Greenwood, grocers, &c., 7, Water-street, Bury, were fined 10s. and costs for selling butter not of the quality nature or substance demanded, on the 4th ult.; and 10s. and costs for exposing for sale margarine without having a label attached to it, on the same date. The Corporation of Bury prosecuted. The evidence was to the effect that on the Inspector (Mr. H. Cass) going into the shop, four out of six lots of butter and margarine were found to be unlabelled. Two lots of margarine were among those unlabelled. He asked for a pound of 11d. butter, and was served with a substance which the Analyst certified to contain 77 per cent. of fats, 2.1 of salt, 1.4 of curd, and 9.4 of water, so that only 10 per cent. of it was butter. Mr. Sutcliffe offered to give the Inspector a note admitting that margarine was sold to him instead of butter, in order to save the Analyst's fee, but the note was declined. Mr. Sutcliffe said he was away at Manchester when the Inspector called. When he left the shop the 11d. margarine had a label on it. During his absence the assistant had been cleaning the plates, and had used a spare one, the result being that, when he had finished, the margarine was on a plain dish, and the 1s. butter on the margarine dish. The assistant, to save the trouble of changing the dishes, had turned the label to the wall. There was no attempt to defraud the public.

Mr. A. J. Bannister, of the General Supply Stores, 60, Acton-lane, was summoned on September 7th, at the Harlesden Petty Sessions, with exposing margarine for sale without it being labelled as such. The Inspector under the Food and Drugs Act to the Middlesex County Council said he went into the defendant's shop, asked for half a pound of butter, and Mrs. Bannister told him they had no butter. They only sold margarine, and he bought half a pound of that. Defendant said the shop was being cleaned, and the margarine was moved from a stand with "margarine" in large letters on it to a side shelf, so as to clean the slab. The Bench fined the defendant 1s. and costs.

At the Faversham County Petty Sessions, on the 7th inst., Mr. Charles Sankey Southes, grocer, of Boughton, was summoned by Superintendent Capps, Inspector under the Food and Drugs Act, for selling butter which was not of the nature, substance, and quality demanded, on July 29. The evidence of Police-constable Poole was to the effect that he purchased several articles of grocery of the defendant for the purpose of analysis, and among other things he asked for 1 lb. of butter. Defendant said, "Do you want butter or margarine?" Witness said, "Butter." "At a shilling or fourteen pence?" asked defendant. Witness replied, "At a shilling." He was served with 1 lb., and paid a shilling for it. Defendant, who is very deaf, maintained that the constable pointed at the margarine, and said he wanted "a pound of that." This the constable denied. He said the defendant quite understood what he asked for. Superintendent Capps produced the certificate from the County Analyst, which stated that the sample contained twelve parts of butter and eighty-eight parts of foreign fat. There was another charge against the defendant for selling margarine under another name, contrary to the Margarine Act of 1877. In answer to this defendant admitted that he did not wrap the margarine in margarine paper. He eventually pleaded guilty in each case. The Chairman (Mr. Sergeant Spinks) observed that the offence was a very bad one, for defendant sold margarine, which was worth 8d. per lb., as butter, and received 1s. for it. In the first case defendant was fined £1 and 10s. costs, and in the second a fine of 1s. and 8s. costs was imposed. The money was paid. At the same sessions John Robbins, grocer, of Eastling, was summoned for using a light and unstamped weight, on July 28. The case was proved by Mr. John Welfare, Inspector of Weights and Measures to the Kent County Council, who said that the 1 lb. weight complained of was $2\frac{1}{2}$ drachms light. Last year he gave the defendant notice to have the weight adjusted, but upon visiting his

shop on July 28 he found that it was still in the same condition. A fine of 5s. and 11s. 6d. costs was imposed, and the weight was confiscated.

At Wolverhampton, on September 6th, Elizabeth Taylor, grocer 292, Bilston-road was charged with selling margarine in a paper not properly labelled, and selling margarine as butter on June 30th. Mr. Allwood said he was inspecting the scales in the defendant's shop when a boy came in and asked for a pennyworth of butter. Defendant cut off two ounces of margarine, and gave it to the boy in a piece of plain paper. The Inspector bought it from the boy and had it analysed. It contained only 5 per cent. of real butter. Mr. A. Turton, who defended, pleaded that defendant was ignorant of the law, but a previous conviction having been recorded against her she was ordered to pay £3 7s. fines and costs.

WHISKY.

At the Halesowen Police-court, September 5th, before Sir Benjamin Hingley, M.P., Major F. D. L. Smith, and Mr. H. Howard, Frederick Walter Wimbush, licensed victualler, Romsley, was summoned for selling adulterated whisky, without any intimation being given to the purchaser. Inspector Raybould said he went to the defendant's house on the 16th ult., and instructed a constable to purchase a half-pint of whisky, for which 1s. was paid. When told that the whisky had been purchased for analysis, defendant said he had in no way interfered with it. The Analyst had certified that the whisky only contained 68 per cent. of proof spirit. Defendant pleaded that he sold the spirit on the same conditions as he bought it, and when he sold a gallon he only made a profit of 2s. 6d. He also had a notice exhibited in the shop that "all spirits sold on the premises were diluted with water." The magistrates pointed out to the defendant that it was the duty of those engaged in the trade to inform the customers the percentage of water in the spirit. The defendant was fined 22s.

41 PER CENT. OF WATER.

At Ennis Petty Sessions, on 1st September, 1893, before Mr. F. G. Hodder, R.M., and Messrs. H. de L. Willis and J. W. Scott, Mr. Thomas Corbett, Ennis, was prosecuted on the complaint of Sergeant John McHugh, Local Inspector under the Food and Drugs Act, for an infringement of the Act in selling whisky which was adulterated by having 41 per cent. of water added to it. Mr. Thomas Lynch, solicitor, appeared for the defence. Sergeant McHugh stated that he visited Mr. Corbett's licensed premises on the 5th August, and got a sample of his whisky. In getting it, he complied with all the requirements of the Act. He sent a sample of the whisky to Sir Charles A. Cameron, the Public Analyst for the County of Clare, whose certificate he produced. In it Sir Charles said his opinion was that the sample of whisky was of inferior quality, and was much adulterated by having 41 per cent. of water in it. It was not much stronger than ordinary grog. (Laughter.) Mr. Dunning said the proper proportion of water in whisky was 25 per cent. In cross-examination by Mr. Lynch, the witness said he had complied with all the requirements of the Act of Parliament. Constable Hayden was with him at the time. He asked for half-a-pint of the whisky and gave one shilling and two-pence for it. He then divided it in three parts, one of which he gave to the defendant. He told him he was going to send it to the Public Analyst to be analysed. Mr. Willis jocularly remarked it was a good thing the whisky was so much adulterated. Mr. Lynch: It was done for safety, sir. Further cross-examined: Sergeant McHugh said the defendant gave him no explanation of the matter. He had never entered Mr. Corbett's house since. Mr. Corbett was very nervous when he found what he wanted the whisky for. (Laughter.) He did not drink any of the whisky himself. In reply to the Chairman, Mr. Dunning said the defendant was liable to a penalty of £20 under the 5th section of the Act. Witness continued, in reply to Mr. Lynch, that it was on a market day he visited the house. Mr. Corbett kept a hotel. Mr. Lynch, addressing the bench, said there was no doubt there was more water than the proper quantity in the whisky, but the defendant did not know anything of it. Mr. Scott: It is a fraudulent sale. Mr. Lynch continued that the day was a market day, and the place ran short of whisky, and it was thought to stretch the whisky as far as it would go with water. (Loud laughter.) He had Mr. Corbett's assistant in court to show that Mr. Corbett was unaware of the addition of the water to the whisky. Chairman: It was a case of obtaining money under false pretences as far as the public are concerned. Miss M. O'Dea was then examined by Mr. Lynch, and said it was she who put some water in the whisky on the previous Wednesday. Mr. Corbett was that day in Limerick, and knew nothing of it at all. When he came back she did not unfortunately tell him what she had done. She had other and better whisky in the house. Chairman: Had you any worse? (Laughter.) The defendant was fined 40s. and costs.

William Tritton, landlord of the Moor's Head, Adisham, was summoned at the Wingham Petty Sessions, for selling adulterated whisky 10.79 below the legal limit. Defendant stated that on the day in question he was away at Sandwich. During his absence his wife had run out of the spirit, and added too much water to it. A fine of £1, including costs, was imposed.

Superintendent Jones summoned Thomas Maynard, innkeeper, Llantrissant, on September 8th, for selling a sample of whisky on the 28th July, which, on being analysed, was found to be adulterated. Defendant said that the whisky he had sold was used for private consumption and was not sold to customers. It was found that the whisky contained 27 per cent. of alcohol and nearly 73 per cent. of water and extraneous matter. Fined 20s. and costs.

MILK.

EXTRAORDINARY MILK CASE.

At Marylebone, on September 9th, Robert G. Norman, a farmer, of Hillfield Farm Dairy, Bushey, Herts, appeared to answer two summonses, taken out by Mr. Reginald Geary, who procured samples of the defendant's milk, alleged to be adulterated by the admixture of 6 and 7 per cent. of water.—Mr. A. F. Jennings, solicitor, prosecuted for the Hampstead Vestry, and Mr. Ricketts, solicitor, watched the case for the West London Dairy Company, to whom the milk was consigned. Mr. Geary, the Sanitary Inspector, deposed to taking samples of the defendant's milk on its arrival at the Kilburn Railway Station on the 11th and 12th August. Professor Stokes analysed the samples, and certified them to contain 6 and 7 per cent. of added water. Defendant said the milk was in the same condition as taken from the cows. The defendant, in reply to the summons, said that, having heard complaints as to the quality of his milk, he had himself seen the cows milked, and the milk sent away precisely in the same condition as yielded by the cows. Last Sunday he called a witness, who saw the cows milked, and a sample sent to Mr. Lloyd, the analyst. The last-named returned a certificate showing the milk to contain 9 per cent. of added water. Afterwards he arranged for Mr. Lloyd himself to see the cows milked and make an analysis of that milk. That was done, with a result that it was certified to contain 8 per cent. of added water. Mr. Fredk. J. Lloyd, Analytical Chemist, gave evidence corroborating the Defendant's statement. He saw 17 cows milked in the middle of the field. All the milk was put into a large churn, and he took a sample. The result of his analysis showed 8 per cent. of added water. Milk was supposed to have a standard composition, but was not known to fluctuate more than 3 or 4 per cent. of water. Mr. Jennings asked the witness to explain how the analysis came to show so much water. Mr. Lloyd said he believed the only explanation to be given was the exceptionally hot and dry season this year, and the effect upon the cows. The dry season had so affected the food as to alter the composition of the milk. The poorness of the food would affect the quality of the milk, and diminish the solids. It was not the dryness of the food eaten that changed the quality of the milk, but the nutriment obtained out of the food by the cow. The quantity of water drunk by the cow was not important. He took it for granted that Mr. Stokes made his analysis on the same calculation as himself. Mr. Plowden, in giving his decision, said the substantial question which underlay all these summonses was whether or not there had been fraud, and that must be proved by cogent evidence, for it was a serious matter for an honourable and respectable man to be convicted of such an offence. The explanation was that the word added in the summons was a mistake, and that due allowance had not been made for the very hot weather and very dry season. The defendant was not responsible for the composition of the milk, but for any water which might have been added to it. He therefore dismissed the summonses.

SOMERSET HOUSE TWADDLE AGAIN AS A DEFENCE.

At Blackpool, last week, Charles Wilson, Marton, was summoned by Dr. Anderson, Medical Officer of Health, for milk adulteration. Mr. Read prosecuted, and said that on the 10th ult. Dr. Anderson stopped defendant's man as he was delivering milk at the Sudbury Company's premises and demanded a sample, which was sent to the Public Analyst. It contained 3.94 per cent. of fat, 7.46 other solids, and upwards of 10 per cent. of water had been added to every 100 parts of milk. It was important to a borough like Blackpool that the food supply should be as pure as possible. He called Dr. Anderson who corroborated and produced the certificate. In answer to Mr. Kay, witness said Dr. Bell, the Analyst for Somerset House, demanded 8.5 per cent. of solids other than fats, but defendant's milk was much lower which showed that water had been added to it. 7½ per cent. of water had been found in pure milk once or twice. There was a very heavy thunderstorm just when the milk was being taken round, but people did not want to pay 3d. a quart for rain-water. Besides, there would have had to be a rainfall of three inches to account for the quantity of water in the milk. Four other samples had been taken on the same day, which had been reported as genuine, and three of them declared rich. In defence Mr. Kay said Analysts were not infallible, and quoted a case where one said there was no coffee in the mixture called chicory and coffee, another said there was 30 per cent., and another 50 per cent. Milk had been found to contain more than 7½ per cent. of water, and there was not a great discrepancy between that and defendant's. The fats were in excess, but solids other than fats were somewhat less, but this could be accounted for. He then called defendant, who said he never allowed water to be put into the milk and never would. They were milking twelve cows, six of which had calved within fourteen days. Before they calved, his milk was found to contain 14 per cent. of cream, but afterwards it only contained 5 per cent. By Mr. Read: There was a flange 2½ in. long above the lid, and all the rain that dropped would go into the kit. By Mr. Bryning: According to my agreement with the Sudbury Company I allowed three days to a cow after calving before I mixed their milk with the other. Thomas Riley, who milked nine of the cows, spoke to there being no water in the kits, and when the milk was put in they never watered it. The Magistrates said they were bound to impose a penalty, but it would be a small one—£1 and costs, including cost of analysis.

Inspector Baxter summoned John Byrne, of 106, Upper Leeson-street, for selling him new milk which was proved by Sir Charles Cameron's analysis to be adulterated with 10 per cent. of water. Fined £1.

At Sheffield City Police-court, on September 8th, John Twigg, 65, Reginald-street, was summoned for selling adulterated milk. Mr. Sayer, Deputy Town Clerk, who appeared for the prosecution, said the practice of selling adulterated milk on Sunday mornings was becoming a very common occurrence. At such times the milk dealers never expected meeting the Inspectors. Mr. Gilley said there was more demand for milk in the poorer neighbourhoods on Sunday mornings than any other days in the week. Mr. Sayer, continuing, said the defendant was seen by Inspector Gibson selling milk in Fowler-street, Bridgehouses, on Sunday, the 13th August. The Inspector purchased a pint of milk, for which he paid 2d., which was subsequently sent to the City Analyst, Mr. Allen, who certified that it contained 88 parts of milk and 12 of water. That was taken on the assumption that the original milk was of a fair average quality; if it were of an inferior quality then the proportion of adulteration would be somewhat less. It seemed to Mr. Sayer that dealers would rather run the risk of being fined than act properly. The defendant called his employer, John Hastings, 65, Reginald-street, who stated that half-a-gallon of water was added to 11 or 12 gallons of milk. The defendant also admitted the adulteration of the milk. A fine of £2 and costs was inflicted.

At Dublin, on September 7th, Sub-sanitary Officer Guy, of Black-rock, summoned Mr. J. Blunt, manager of the Limerick Junction Butter Depot, which has a branch in Dublin, for selling buttermilk adulterated with 30 per cent. of water over statutory allowance. From the evidence it appeared that the milk was retailed in Black-rock by a man named Buckley, who had purchased it from defendant. A certificate from Sir Charles Cameron was handed in in support of the allegation in the summons. A fine of £10 was imposed.

At the Police Court, Yarmouth, Charles Church, dairyman, was summoned for selling adulterated milk. The Town Clerk prosecuted, and Mr. A. E. Cowl defended. The Town Clerk said the milk had been adulterated to the extent of 15 per cent. of water. Mr. P. O'Connor, Sanitary Inspector for the borough, deposed to visiting the defendant's house, at No. 16, Howard-street, on August 16th, when he bought a pint and a half of new milk, which was served by defendant's daughter, and for which he paid 2½d. After he had got it he told her he was going to have the milk analysed. The defendant then came into the shop and said it was not his milk, as his own was sold out. Witness took the milk to Mr. Sutton, the Public Analyst, the same day. Cross-examined: The defendant's daughter and Mrs. Church told him that the milk had come from Mr. Harris, and had been left a quarter of an hour before, and that if he had been a little earlier he might have had some of their own. He had had samples from this place upon several occasions, and had always found them good. Miss E. Church, the defendant's daughter, said that as her father's stock of milk was exhausted at nine o'clock, she had bought two gallons of milk from Mr. Harris who had come round shortly after and asked her to take some. When Mr. O'Connor came she and her mother told him that they could not possibly recommend the milk then on the premises. By the Mayor: She did not tell Mr. O'Connor that she could not recommend the milk until he said what he wanted it for. She paid Harris 10d. a gallon for it, which was the regular price. They had frequently bought milk of Harris before. The defendant and Mrs. Church corroborated. Mr. Cowl submitted that the defendant was in no way to blame, as the milk was not his own. He had been a dairyman for twenty-four years, and samples had been taken from time to time, and they had always turned out to be good. His customers had never complained. The Mayor (to Mr. O'Connor): Did you believe that statement of the defendant's daughter to the effect that the milk came from Mr. Harris? Mr. O'Connor: I had no reason to doubt it. The Mayor said the Magistrates had decided to convict in this case. It was no excuse in law for them to say that they had bought milk from anyone else. They must be solely responsible for the milk they sold. As the defendant's daughter had said they could not recommend the milk it showed pretty clearly that they suspected it. As defendant had an excellent character, there having never been any complaints against him previously, he would be fined the minimum penalty of 5s., and costs 27s. 6d.—George Gibbs was summoned for a like offence. The Town Clerk prosecuted. Mr. O'Connor said he went to the defendant's shop at 45, Middlegate-street. He asked for a pint and a half of new milk, for which he paid 2½d. He also took this to Mr. Sutton, the Public Analyst, who found it to contain 10 per cent. of water. Defendant said he bought all his milk to sell again, and the milk had only just been left at his house when Mr. O'Connor came, and he pointed out the cart to him as it was leaving. The milk had just come from the cows on the marshes. The Mayor said it was often the case when cows came off the marshes that the water was added to the pail. (Laughter.) Defendant would be fined as in the last case, namely, 5s. and costs.—Joseph Camp, dairyman, was summoned for selling adulterated milk. The Town-clerk supported the information. The defendant did not appear, but was represented by his local manager, Mr. J. W. Warnes. The Town-clerk said the adulteration in this case was 12 per cent. of added water, and called Mr. O'Connor, who stated that he called at the defendant's shop on August 16th and asked for a pint-and-a-half of new milk for which he paid 3d. He was served by Mr. Warnes, The Clerk (to Mr. Warnes): What has Mr. Camp to say to this? Mr. Warnes: He knows nothing whatever about it. The Clerk: It is nonsense your talking like that. You are here to represent Mr. Camp, and we want to know your defence. Mr. Warnes said that during the last few weeks he had been round with the milk cart himself, when he had run short of milk, and had bought some to save the trouble of going back to his shop. It was some of the milk purchased in that way that Mr. O'Connor had taken. The Magistrates imposed a fine of 5s. and costs.

At the Chesterfield Borough Police-court, on September 4th, before W. M. Manlove, and Mr. P. H. Chandler, Joseph Buxton, Walton Hall, and Thomas Gaunt, Stonegravel, were summoned at the instance of Mr. Chas. E. Wood, the Sanitary Inspector for the Chesterfield Corporation, for selling adulterated milk, on the 23rd of July. Defendant admitted selling the milk, but said that he had bought it. Mr. Middleton, who prosecuted, said Mr. Wood, on the day named, took samples from six or seven milk sellers. The sample he took from Mr. Buxton was divided into three parts, one of which was forwarded for analysis. The Borough Analyst reported that the sample submitted to him contained 88 parts of milk and twelve parts of added water. Mr. C. E. Wood, having confirmed this statement, the defendant said he bought the milk, twelve gallons altogether, from Mr. R. Hardwick, of the Bridge Inn farm, and he sold it just as it was purchased. Mr. Hardwick supported this statement, but Mr. Middleton contended that to make that plea successful defendant should have had a written warranty from the person from whom he bought the milk. Fined 10s., and costs 16s. 6d.—Gaunt was then charged with a similar offence, but said he wished to object to the summons because when it was served upon him there were no particulars upon it. Mr. Middleton said he himself did not know the particulars until that morning. Mr. Gaunt said he had a further objection. He was not served with the summons until 28 days had elapsed, whereas the Act provided that the summons should be served within that period. Mr. Middleton, that is quite right. I knew nothing about the issue of the summons and nothing about the service of it. The summons was withdrawn.

At Edinburgh Police-court, on September 5th, Ann Campbell, Dundee-street, was charged with having, on 21st July, sold to two Inspectors 2d. of sweet milk "not of the nature, substance, and quality of the article demanded." An analysis showed that the milk had been deprived of one-sixth of its natural fatty constituents. In the witness-box Miss Cameron said that she sold the milk as it was supplied to her by a dairymen. When the Inspectors called they got the last of the milk in the dish, and the last was always of poorer quality than the first of the supply. When she sold the milk to the Inspectors she told them so. Acting-Sheriff-Substitute Sym remarked that she would have had a good defence if she had got a written warranty from the man from whom she bought the milk. An agent replied that it would be inconvenient to get a warranty with every supply. Margaret Porteous, Dundee-street, was afterwards tried on a somewhat similar charge. She stated that she sold the milk as she got it from two dairymen, and that during her twenty-five years' experience she never heard of anyone getting a warranty with the milk from dairymen. The analysis showed that the milk had been deprived of one-fourth of its fatty constituents. The Sheriff found the charges proved, but remarked that they were not serious cases. In each case a fine of 10s., with the alternative of two days' imprisonment, was inflicted.

DISEASED MEAT AND MANURE.

NUISANCE PROSECUTION AT PRESTON.

George Newsham, manure manufacturer, of Preston, was summoned by the Corporation, at Preston, on September 8th, for having caused a nuisance in the course of his business at Ribbleson. Inspector Jackson, of the Sanitary Authority, spoke to visiting the premises at various dates. On one occasion he found flesh, &c., exposed in the yard to the rays of the sun. The smell was very bad, almost unbearable, and the yard in a filthy condition. There was a quantity of animal matter in the sheds, some of which was in a putrid state. He called defendant's attention to it, and lime and vitrol was put on. In August he found the carcase of a cow which was "one living putrid mass, and, in fact, I could hear the maggots." One Inspector said that the first time he visited the yard he was so upset that he could not take his tea. Dr. Pilkington, Medical Officer of Health, said the defendant manufactured manure from refuse animal matter. In one portion of the buildings were scores and scores of tons of animal matter in a filthy and putrid condition. Several rats were seen swimming across pools in the yard. It was in a shocking condition. Some of the matter was in a green putrid mass, and one could hear the maggots rustling and crawling. The defendant had been warned, but no serious effort had been made to abate the nuisance. For the defence Mr. Parker submitted that the case fell through inasmuch as the Town Clerk, who prosecuted, had neglected to put in the resolution of the Sanitary Committee authorising him to take those proceedings. The Town Clerk said he had it with him and could put it in. Mr. Parker objected, remarking that the case was closed. The Chairman: But we can grant him that privilege? Mr. Parker: Certainly, if you would go against an Act of Parliament. The Chairman: I suppose, Mr. Hamer, you know of this Act? The Town Clerk: Of course I do. The Chairman (warmly): Then you ought to make yourself familiar with it. Mr. Hamer: I am familiar with it. The Chairman: Then why don't you observe it. The resolution was formerly proved, and after one or two more objections the case proceeded. Two previous convictions were put in, and after a brief absence, the Chairman said that defendant appeared to have done nothing to remedy the evil since his last conviction, and he would be fined £10 and costs, in default two months' imprisonment. The commitment was suspended until Wednesday to enable him to pay.

UN SOUND FOOD.

Isaac Jones, butcher, 279, Derby-road, was summoned before Alderman Webster, Dr. Young, and Mr. J. Wells, at Bootle Police-

court, on September 5th, for exposing for sale 61lbs. of meat which was unsound and unfit for human food. Mr. Farmer (Town Clerk) prosecuted, and Mr. Carey appeared for the defendant. Mr. Farmer said that on the 28th ult. the Inspector visited defendant's shop and found two portions of meat—one weighing 38lbs. and the other 23lbs.—which he considered unsound and unfit for food. The meat was subsequently examined by a justice, who gave an order for its destruction. The shop in which the defendant carried on business was situate in one of the poorest parts of the town, where possibly the people required, more than in any other part, protection from consequences which might arise from the sale of putrid meat. Mr. R. J. McCulloch, Assistant Sanitary Inspector, deposed to visiting the defendant's premises and finding the bad meat. The piece weighing 38lbs. was green and decomposed, and stank most offensively. It was quite unfit for human food. He also saw a fore-quarter of beef most of which was unfit for food. By Mr. Carey: Defendant said he was going to sell the meat. Mr. William Daley, Sanitary Inspector, said that from information given by the last witness he went to defendant's shop and examined the meat complained of. The piece weighing 38lbs. was unsound and gave off an "abominable stench." It was green and very badly coloured. He had no doubt whatever that it was quite unfit for human food. Witness seized the meat, and sent for the Medical Officer of Health, who examined it before it was seen by the Justice. Mr. Carey: Why did you not give defendant sufficient time to have the meat independently examined before it was destroyed? Mr. Daley: He had four hours. The meat was full of maggots; it would have been walking away in the morning if we had left it. (Laughter.) Dr. Sprakeling, Medical Officer of Health, described both pieces of meat as unsound and unfit for human food. Mr. Carey said the defendant did not deny that the first piece of meat which the officer saw was bad. The manager, after cleaning the shop, was examining the meat for the purpose of picking out those pieces which were bad. He had not seen the bad piece when the officer came into the shop. James Gregory, who had been manager of the shop for five weeks, having given evidence to this effect, Alderman Webster said the meat was evidently for sale, and fined the defendant £2 and costs. Mr. Farmer asked that a guinea fee for the doctor's attendance be included in the costs. Mr. Carey objected, saying it was Dr. Sprakeling's duty in his official capacity to attend Court in such cases. Mr. Farmer said that in the Medical Officer's contract there was no requirement for his attendance at Court. The fee was always paid. The Bench ordered the amount to be included in the costs.

At the Bolton Police-court, on August 30th, Joseph Haslam, 158, Clarence-street, was charged with having the carcase of a cow in his slaughter-house, St. Helena-road, dressed, but unfit for food, on the 23rd ult. Mr. R. G. Hinnell (Town Clerk) prosecuted, and Mr. Fielding was for the defence. Inspector Spencer visited the slaughter-house about two o'clock on the afternoon in question, and found a carcase of beef dressed in the ordinary way for human food. The internal organs had been removed, but the flesh not having a healthy look the Inspector asked for the internals. Defendant's son, who was the only person present, fetched them from the manure tank in the yard. The lungs had been cut up into about half a dozen pieces, but the liver was practically whole. An examination revealed the lungs to be in a very bad state. The animal must have been suffering from acute tuberculosis. The carcase was seized, examined by Dr. Scowcroft, and subsequently condemned by a magistrate. Mr. Fielding, in defence, contended that there was no guilty knowledge on the part of defendant. Defendant's son was instructed to send for the Inspector if anything suspicious should arise in regard to a carcase, and in the present case he had been negligent. Defendant knew nothing about the carcase until he was sent for by Inspector Spencer. The Magistrates said they considered the case proved, but in view of the good character Haslam bore they would only inflict a fine of 40s. and costs. Mr. Fielding asked for a case on the ground that the evidence showed that there was no guilty knowledge. The Bench granted the application.

MARKET REPORTS.

LONDON, SUGAR.—There is an active demand for British refined, and prices continue to advance. Pieces sold well at generally a gain of 3d. Crystals in good demand, with yellows fully 3d. higher. Dried goods show a good inquiry at the following advanced rates:—Tate's No. 1 cubes, 23s; No. 2, none offering; crushed, 20s 6d and 20s; Martineau's pulverized mineral water sugar and granulated, 20s 6d; white crystals, 21s 6d, 21s, and 20s 6d; yellow ditto, 18s 9d; golden syrups, 14s 6d, 9s 6d, and 8s; Lyle's granulated, 20s 3d; yellow crystallized, O and P, 18s 9d; R, 17s 9d; crystals—No. 1, 20s 6d; No. 3, 19s 9d.; Fowler's golden syrup, 14s. Foreign refined firmer at 3d to 1½d advance with a moderate trade. Granulated, ready S P R on sample, sold at 18s 7½d; and S T A R, 19s; September S P R, 18s 6d; October E C H, first week, 18s, 3d; G S W, 18s 1½d; Groningen R A V and Z H, second half 18s; F M S all the month, 17s 3d, and E C H, 17s 3½d; November-December, S T A R, 16s 8½d, and first marks, 16s 7½d to 16s 8½d; March-May S T A R, 16s 9d, f.o.b. Hamburg. Crushed firmer, Dutch, A S R, super prompt, sold at 18s 7½d to 18s 9d, f.o.b. Amsterdam; Austrian, T T D and V and P anchor November-December, 16s 9d, sellers, f.o.b. Hamburg. French goods firm—Crystals super 3's, 17s 8½d, c.i.f. sellers; fine sold 17s 9d, f.o.b.; Lebaudy's granulated—a large business done, fine at 18s 9d, uncoloured mineral water, 18s 7½d September delivery; cubes prompt, 20s 3d; also R P at 20s 3d; Say's loaves, September, 19s 6d sellers; cubes ditto sold at 20s 6d f.o.b. Paris. Cane sorts firm with a good inquiry, but holders

asking more money somewhat checks business; 1,000 bags crystallized Trinidad and Demerara, low to good yellow, sold at 19s 3d to 20s. Beetroot again opened firm, September showing an advance of 3d., at which refiners secured all offering. New crop hardened to the extent of 3d to 1 1/2d, showing some slight fluctuation during the day, but with buyers for foreign account little reduction was accepted, and the close was firm at fully the best. September, 15s 3d and less 3/4d; October, 14s 4 1/2d plus 1/2 and net; November-December, 14s 3d plus 1/2 and net; and January-March, 14s 6d and 5 1/2d. Contracts registered for 31,000 bags. Stock in Hamburg, 11,100 tons, against 14,600 last week and 26,450 tons a year ago.

COFFEE.—Ceylon, common bold greenish to extra bold blue, 99s. to 106s 6d; small to medium, 93s to 102s; peaberry, 99s to 123s; triage, 83s to 89s. New granada, good ordinary dull greenish, 85s to 85s 6d (London cleaned); bold musty coloury, mixed reds and blacks, 90s.; mixed smalls, 81s. 6d.; peaberry 93s 6d. Vera Paz (London cleaned)—good middling blue mixed reds, 97s; mixed smalls, 80s; peaberry, 107s 6d; small greenish mixed, 82s to 85s 6d Guatemala, fine ordinary to low middling dull greenish, 89s 6d to 95s.; good ordinary greenish, 85s; Mexican, good middling mottled gray, 94s 6d (London cleaned); medium to bold faded coloury, 97s 6d to 99s 6d; mixed small, 88s 6d; peaberry 108s 6d. Futures continue firm, with a moderate trade of about 4,000 bags. September, Rio, 76s 3d, 76s 6d; December, 75s, 75s 3d; March, 73s 9d. Closing values.—September 76s 6d; December, 75s 3d; March, 73s 9d; May 73s 3d. Contracts registered for 6,000 bags Rio.

TEA continues steady. The auctions comprised 4,896 packages of China of better assortment, but the bulk of the Congous failed to attract many buyers. Scented Capers partly sold at steady prices. Formosa Oolong sold well at 10d to 1s 4 1/2d; also 10,984 packages Indian were nearly all sold at firm to dearer rates for common to low medium sorts. Fine and finest still being very scarce realized very full prices. Terminals unchanged. Contracts registered for 2,500 half-chests to China.

RICE continues very dull and unchanged.

TAPIOCA.—Flake steady but quiet, and of 1,989 bags in auction about one-fourth sold—fine Singapore, 1 1/2d; rather yellowish, 1 13-32d. Pearl seed dearer, other kinds quiet; of 1,595 bags 359 sold—fine bright seed, 13s; fully fair, 11s 9d.

SAGO firm, 240 good large offered and sold at 15s 6d. For arrival, 100 tons small, October-December, steamer, reported sold at 9s 6d, c.i.f. terms being dearer.

ARROWROOT steady. Of 200 barrels St. Vincent about half sold—good, 3 1/2d; 30 cases fine Natal at 6d.

CANARYSEED.—Of 426 bags 200 Turkish sold at 34s.

SPICES.—**PEPPER.**—Black, steady; of 636 bags half sold—good bolt Singapore, 3 1/2d; fair, 3d; good heavy Penang, weight 6lb 6oz, dust 1-58 per cent, 3 1-16d; 5lb 3oz, dust 1-87 per cent, 2 1/2d. White Singapore easier; other kinds quiet. Of 751 bags only 191 sold—dullish to fair Singapore, 4 1/2d to 4 9-16d; fair Siam, 4 1/2d. Pimento steady, but quiet; of 1,900 bags only 300 sold—low gray to fair, 2 1/2d to 2 3/4d; good, 2 13-16d to 2 1/2d. Mace firmer; of 79 packages half sold—fair pale and reddish Penang, rather wormy, 1s 8d; dull red mouldy and rather wormy, 1s 5 1/2d; dull pickings, 1s 4d to 1s 4 1/2d; thin bright red Java, character rather wormy, 1s 7d; rather dull and broken, 1s 5 1/2d to 1s 6d. Nutmegs dearer, and of 91 packages nearly all sold—Penang 6 1/2s, rather mouldy, 3s; 6 1/2s, 2s 11d; 8 1/2s, 2s 4d; 17 1/2s, partly shrivelled and wormy, 1s; Java 10 1/2s, part rather dark, 1s 9d; 12 1/2s, part rough and defective, 1s 5d; 8 1/2s, 1s 10d; 9 1-5s, 1s 9d; 10 1/2s, 1s 8d; 10 1/2s, 1s 7d; 13 1/2s to 13 1/2s, 1s 5d; 12 1/2s part shrivelled and defective, 1s 3d; 14 1/2s, ditto, 1s; shrivelled, 9 1/2d; Bombay 8 1/2s, 2s 4 1/2d; 9 1/2s, 2s; 10 1/2s, 1s 9d. Chillies flat—Zanzibar middling, 30s; Cassia Lignea, broken, partly sold, 18s. Ginger—Cochin dearer and about 500 bags sold on the spot; medium and small washed, 59s to 60s; small rough, 47s; 17 cases in auction bought in. Bengal firmer and in good request; about 1,200 bags sold at 48s to 50s, with buyers over. For arrival, business is reported at 51s on c.i.f. terms, but shipment and quantity kept secret. Twenty-two cases mouldy Japan sold at 22s; Jamaica dearer, 50 barrels sold—common to low middling, 65s to 69s 6d. Cloves—spot steady but quiet, with moderate sales of fair at 2 1/2d. Of 219 bales only 10 sold at 2 1/2d. For delivery easier—January-March, 2 13-16d, nominal. Penang steady; five cases offered and sold—fair picked, 9d.

LINSEED OIL quiet. Spot pipes, waterside, 21s; landed, 21s to 21s 1 1/2d; barrels, 21s 1 1/2d; month, 21s; October-December, 20s 4 1/2d; January-April, 20s; Hull, naked, spot, 20s 6d; October-December, 18s 6d; January-April, 18s 4 1/2d.

RAPE OIL firm. English brown, spot, 22s 6d; September-December, 22s 6d; January-April, 22s 9d; refined spot, 24s; Ravison, 21s.

COTTON OIL steady, little offering. Spot, crude, 19s 3d; November-April, 17s 3d; refined, according to make and package, 21s to 23s; Hull, naked, spot, 19s 9d; November-April, 17s 6d; crude, 17s 6d.

TURPENTINE about steady. American, spot, 22s; month, 22s 3d; September-December, 22s 3d; January-April, 23s. 3d.

PETROLEUM quiet. American, spot, 3 15-16d.

TALLOW steady. P.Y.C., 48s.; Australian, fair to fine mutton, 27s 6d to 29s 3d; beef, 26s 6d to 27s 6d.

LIVERPOOL.—**Sugar.**—The tendency towards an improved trade in cane sugar on this market has been rather held back by the firmer attitude of holders, who are now asking a fairly substantial advance on last week's prices. 6,120 bags Mauritius syrups, however, sold at 13s. in store. Beet closed strong, with 4 1/2d advance bid for September. New crop was firm, without change. September, 15s 3d, buyers; October, 14s 5 1/2d, value; November-December,

14s 3d, buyers; January-March, 14s 5 1/2d, value. Crystals are rather dearer; Tate's No. 1, 21s 9d; small, 21s 6d; No. 2, 21s per cwt, forward delivery; granulated standard, 20s 6d, coarse and fine, 20s 9d per cwt. Coffee is not selling very briskly in consequence of the advance now established. 200 bags African bold berry sold at 69s 6d per cwt in store. Cocoa is inanimate and prices have not been tested for days past. Rice has a quiet trade at previous prices for store parcels, chiefly in cleaned for export, but cargoes still find little demand, and nothing has been reported sold on this market for a long time back. Sago Flour is freely offered both on spot and to arrive at last quoted prices. Linseed continues very dull and seed-crushers are quite indifferent. Tallow has rather a quiet trade and prices are unchanged. Palm Oil, though dull, is firm and quotations are full. Linseed Oil is firm at 22s 6d, and Liverpool refined cotton oil at 22s per cwt in casks. Castor Oil dull, and Calcutta quoted 2 5-16d per lb for good seconds. Rosin steady, but supplies are fair. Turpentine is rather easier at 22s to 22s 3d per cwt.

GLASGOW, Sept. 13.—The Sugar Market to-day was active, and in Clyde crushed a large business was done in all descriptions at stiff prices. Beetroot was quoted at 15s 4 1/2d, c.i.f. basis 88 per cent. There was again a good demand for foreign refined.

LONDON, Sept. 13.—**CHEESE.**—American fresh landed being of better quality are making 49s both for white and coloured, and even 50s is reported paid for a few extra fancy coloured; but older goods are easy at 1s to 2s reduction, Canadian offering at 46s. Dutch nominally unaltered; Edams, 52s to 56s; Goudas, 47s to 52s.

BUTTER.—Danish, following the general tendency, has been quiet, with choice quoted 2s lower, at 128s to 132s. Normandy is in good demand for best ordinary at 120s to 122s, but other sorts are rather neglected. Friesland comes unchanged from the Sneek market.

LARD.—American is firm on the spot at 48s, for pails, and September-October shipment is 1s 3d dearer at 46s 9d to 47s 6d c.i.f. London. Irish bladders remain at 5 1/2s to 62s, with kegs f.o.b. Waterford at 53s to 54s.

BACON.—Although the tone is quiet there is not much on the market, and Irish, therefore, is unchanged, but Continental, in view of expected heavy supplies, is generally 1s and occasionally several shillings lower. Irish—Lean sizable, 69s to 72s; stout and stout sizable, 68s to 71s. Danish—Lean, No 1, 68s; No. 2, 65s to 66s; No. 3, 60s to 64s.

HAMS.—American landed Liverpool are offering at 55s for short cuts of 16lb to 16 1/2lb, and long cuts of similar weights at 56s to 63s; Irish have ruled firm at 108s to 114s.

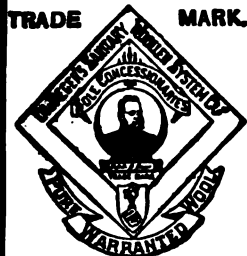
LIVERPOOL.—**Bacon.**—The demand is hardly so good, but as arrivals, although more liberal, are well cleared there is no relaxing in prices. Shoulders.—The demand for both New Yorks and square cuts is indifferent, and with supplies plentiful buyers have the advantage. Hams.—The sale of long cuts is very slow, and holders are prepared to accept less money. Short cuts are also easier, holders being anxious sellers. Lard on the spot, following the upward movement in America, is again dearer, and a fair business is doing at the enhanced prices. American refined steady. Cheese.—The demand is still very slow, without signs of improvement, but holders make no change in prices, which are upheld by the stronger advices from the other side. American butter steady at previous currencies. Margarine very firm and, owing to the high price of butter, a large business is doing. Eggs do not move briskly, but holders are asking rather more money for both Irish and Canadians. Beef firm, the stock of fine grades being small. Pork firm for finest sorts through scarcity, but others neglected and values practically nominal.

	s.	d.	s.	d.		s.	d.	s.	d.
Beef, per 204lb.					Lard, per 112lb.				
India mess ex.	..	68	9	to 76	U.S. firkins	..	44	0	to 46
Pork, per 200lb.					Cheese, per 112lb.				
Prime mess	..	80	0	— 87	Finest States and				
Bacon, per 112lb.					Canadian	..	47	0	— 48
Waterford	..	78	0	— 75	Fine to finest				
Continental	..	67	0	— 69	Cheshire New	..	50	0	— 55
American—					Butter, per 112lb.				
Long clear	..	52	6	— 55	Irish Creameries,				
Short clear	..	49	6	— 50	Finest	..	128	0	— 132
Short rib	..	57	0	— 58	Irish Factories	..	120	0	— 123
Cumberland cut	..	56	0	— 59	Irish Farmers	..	116	0	— 118
Staff cut	..	59	0	— 60	Danish, choicest	..	130	0	— 135
Clear bellies	..	64	0	— 66	U.S. and Canada,				
Short clear backs	..	54	0	— 55	Fine to finest	..	86	0	— 102
Hams, per 112lb.					Choice mild Cana-				
In salt, long cut	..	53	0	— 58	dian creamery	..	121	0	— 124
Short cut	..	51	6	— 55	Margarine, per 112lb.				
Shoulders	..	36	0	— 43	Medium to finest	..	47	0	— 66
Lard, per 112lb.					Eggs, per 120				
United States,					Irish—Hen	..	6	8	— 7
good to fine	..	44	9	— 45	Do., 2nd quality	..	5	0	— 6
U.S. refined	..	48	0	— 49	Canadian	..	6	2	— 6

CORK BUTTER.—A slightly firmer tone prevailed. Fourths and milds advanced, and the demand generally was stronger. There was a full supply of all descriptions, which were marketed in excellent condition. Quotations:—Mild cured superfine firkins, 115s; fine mild, 110s; mild, 102s; ordinary firks, 105s; seconds, 93s; thirds, 83s; fourths, 76s. Kegs, nil. No of firkins in market, 1059. The weather continues fine.

GLASGOW.—There have been liberal arrivals of Scotch cheese this week and the demand continues dull. Prices are weaker except for fancy cheeses, which are scarce and command extreme rates. Quotations:—Fancy Cheddars, 58s to 61s; ordinary Cheddars and Dunlops, 46s to 55s. Arrivals of American continue free and are meeting with only a moderate sale. Anything not strictly fancy keeping cheese is weaker, but prices for finest are firm—viz., finest coloured, 46s to 48s; white, 46s to 47s.

TESTED FOR PURITY NON-SHRINKING AND STRENGTH.

Protection from Chill in all Climates.

JAEGER PURE WOOL CLOTHING.

The Best is the Cheapest!
Fixed, moderate prices for first quality.

The "JAEGER" Goods are tested for Purity in the Company's own Laboratory and Guaranteed by this Trade Mark, without which none are genuine.

Dr. Jaeger's "Health Culture," and Jaeger Company's Price List, sent free on application.

WEST-END JAEGER DEPOTS:

8 & 4, PRINCES STREET, CAVENDISH SQUARE (near Regent Circus).
 80, PICCADILLY (near St. James's Hall).
 80, SLOANE STREET (adjoining McPherson's Gymnasium).
 456, STRAND (near Trafalgar Square).

CITY JAEGER DEPOTS:

85 and 86, CHEAPSIDE (near King Street).
 158, FENCHURCH STREET (near Lime Street).
 42 and 43, FORE STREET (near Moorgate Street Station).

BOVRIL

Contains in an

EASILY DIGESTIBLE FORM
 the ALBUMEN and FIBRIN,
 the NUTRITIOUS CONSTITU-
 ENTS of PRIME OX BEEF.

BOVRIL, Ltd.,

Food Specialists,

LONDON.

Directors { Rt. Hon. LORD PLAYFAIR, K.O.B., LL.D.
 ROBT. FARQUHARSON, Esq., M.D., M.P.,
 &c., &c.

Food and Sanitation.

SATURDAY, SEPTEMBER 23, 1893.

THE FERTILISERS AND FEEDING STUFFS BILL.

We have before us a copy of the Fertilisers and Feeding Stuffs Bill as amended by the House of Lords and sent down to the Commons, in the shape in which it is likely to become law on January 1st, 1894.

This measure, intended to protect the long-suffering farmer against the swindlers who supply sand instead of guano, or gypsum instead of superphosphates, was, we believe, honestly intentioned by Mr. Gardner, but it has every appearance of being ruined at the very outset of its career by a clause inserted by the

CALVERT'S CARBOLIC OINTMENT,

Large Pots, 13½d. each, with full Instructions.

Court Circular says: "We cannot too highly recommend Calvert's Ointment. It is the best general Ointment with which we are familiar, and ought to be a stock remedy in every household."

Private report from Limassol Cyprus: "I have never found anything to come up to it for neuralgic 'Rheumatic Pains.'"

Samples sent Free by Post on receipt of value.

F. C. CALVERT & CO., MANCHESTER.

Awarded 60 Gold and Silver Medals and Diplomas.

DISINFECTION WITH "SANITAS."

A very careful investigation just made by Dr. A. B. GRIFFITHS proves that "SANITAS" DISINFECTANTS, readily, kill all Disease Germs, including the Microbes that cause

CHOLERA, FEVERS & DIPHTHERIA.

"SANITAS" DISINFECTANTS

are Fragrant, Non-poisonous, and do not stain. They embody all the healthful principles of Pine and Eucalyptus Forests, and are the best for general use.

Copies of Dr. GRIFFITHS' REPORT, together with full particulars of

"SANITAS" DISINFECTANTS & "SANITAS" APPLIANCES

Will be sent free on application to

The "SANITAS" Company, Lim., Bethnal Green,
 LONDON, E.

Minister of Agriculture himself. The cloven hoof, however well disguised, shows itself in the Bill, and discloses the fact that the forces which placed Somerset House at the head of the Food Acts, to the incalculable damage of producers and consumers of food, are evidently still working in officialdom.

Clause 4 reads as follows:—"The Board of Agriculture shall appoint a chief agricultural Analyst (hereafter referred to as the Chief Analyst), who shall have such remuneration out of moneys provided by Parliament as the Treasury may assign. The Chief Analyst shall not, while holding his office, engage in private practice."

The Bill as originally drafted, which was criticised by us on June 17th, did not contain the sentence "The Chief Analyst shall not, while holding office, engage in private practice," and had Mr. Gardner consulted experts upon this question he would have seen how fatal is the addition.

It is exceedingly unlikely that any very great number of samples will be submitted to the Chief Analyst in the course of any year, for it is only when the seller or the buyer objects to the certificate of the district Analyst that a duplicate sample may be submitted to the Chief Analyst for control. As the district Analyst is to receive with each sample the invoice or copy thereof referring to the article to be analysed, which invoice contains a statement of the alleged composition of the article, the district Analyst will only in very rare cases certify against any article received without having amply satisfied himself by duplicate analysis or examination that the invoice is an incorrect one, and disputes will probably be uncommon. Even under the Sale of Food Act, where matters of far greater intricacy are to be dealt with by the Analyst, and 27,000 samples are taken every year, only about fifty cases are referred to the "Chief

Analysts" at Somerset House, and out of these fifty the certificate of the latter confirm in all but two or three cases each year the certificate of the district Analysts. But, even assuming that 27,000 samples will be analysed under the Fertilisers Act by the district Analysts, and that fifty of these samples are referred to the Chief Analyst per annum, is that sufficient to keep an officer employed who is to devote the whole of his time to the duties of his office? As every practical Public Analyst knows that the samples referred to the Chief Analyst would be very few indeed, it is absurd in the extreme to appoint an officer to be the referee solely under this Bill and debar him from private practice. Where is that officer to get the experience from, without which his opinion will not be worth having? No Analyst who at present has any position in the analytical world, whose analysis would be received with confidence by his brethren, and whose authority would be cheerfully acknowledged, could give up his "private practice" for anything like the salary which the Agricultural Department is likely to offer, or which would be an adequate payment for the light duties likely to fall upon the Chief Analyst. A young man without experience or authority might take the post, but would men like the chemist to the Royal Agricultural Society, or the half-dozen well-known agricultural Analysts of this country condescend to work as district Analysts under such a one? Would any public Analyst of experience take an appointment as district Analyst when he knows that his reports would be checked and be at the mercy of an officer as inexperienced as were the officers who were placed as referees at the head of the Sale of Food and Drugs Act? The smallest knowledge of the friction caused by the selection of the Inland Revenue chemists for positions in which they have become notorious for incompetence, would have prevented the Minister of Agriculture walking into the trap which he has blindly entered. If, then, a man of standing and experience is not likely to accept the post of Chief Analyst shortly to be created, and if a young and inexperienced chemist who might be willing to take it is an impossibility, there remains but one alternative, namely, that the restriction has been made with the sole object of handing over this important refereeship either to Somerset House or to a creature coming from that quarter. God help the Fertilisers and Feeding Stuffs Bill in that case.

We suppose it is now too late to endeavour to alter the Bill after it has been sent down from the Lords, the amendment having been perpetrated in the House of Commons, but it ought not to be too late to prevent the appointment falling into the hands of one of the incompetent Somerset House chemists. Mr. Gardner is, we believe, honestly anxious to benefit English agricultural interests. He has here an opportunity of initiating a wise, patriotic and necessary policy. The Board of Agriculture sadly needs a really expert analytical chemist who could advise County Councils and agriculturists upon dairyfarming, &c., much after the manner in which Professor Böggild advises the Danish Government. The present appointment offers the means of creating a really competent official referee under the Food and Drugs Acts, for which change every Public Analyst in the country has petitioned. There is no chemist in the country with sufficient experience to take up the duties of Chief Analyst who is not engaged in private practice in some way or other, and it is only in private practice that the knowledge and experience can be gained which is essential to the proper fulfilment of the work of the post. To induce any of the few chemists who are really qualified to accept the post the salary would have to be no small one, but the refereeship alone of the Fertilisers and Feeding Stuffs Bill, with its scant work would not warrant the payment of other than a meagre salary. If the various duties, the unity of which we have suggested, i.e., scientific adviser to the Board of Agriculture and County Councils, &c., upon dairy farming, the referees under the Food and Drugs Acts, and the Fertilisers and Feeding Stuffs Bill were grouped together and placed under the care of such a really capable scientist, then an adequate salary, say of £1,000 to £1,500 per annum, could be offered for the post. At such a salary, not agriculturists alone, but traders and the general public would find the appointment a very cheap one, for it would save them some millions of money per year. But there is not one chemist in the Inland Revenue Laboratory who is fit for such a post.

Somerset House for such work has shown itself to be absolutely incapable, and, as we have proved, its chemists should be debarred, inasmuch as they have been surreptitiously engaged in private practice. Besides this, their work has nothing whatever to do with the analysis of fertilisers and feeding stuffs. It lies with spirits, beer and tobacco. No doubt some Inland Revenue chemist has lately occupied himself—just to get a crammed surface idea of the work—with the analysis of feeding stuff and fertilisers, and all outsiders being debarred, some one of the Somerset House chemists will endeavour to show that he is the only qualified candidate for the office. By pulling the political strings he may hope to get the appointment, at once damning the Fertilisers Act, as the Somerset House incompetent chemists have done the Sale of Food and Drugs Acts.

This clause, which threatens to be fatal, is enough without lengthy examination of the other provisions of the bill, but we are glad to note, that there is nothing in them corresponding to the warranty clause of the Sale of Food and Drugs Act, through which any offender may escape punishment. The seller of an adulterated feeding material or fertiliser shall be prosecuted, even if he have a warranty from a third party, and it is left open to him to apply such remedies, civil or criminal, against the person from whom he bought the article, as are available to the person who bought the article from him. We hope that Sir Charles Cameron, Bart., will derive a lesson from this. It was in June last that we gave the measure textually to our readers, and at that time it was intended that the invoice should be a warranty. We are pleased to see that our exposures of the "warranty dodge" have had, at least, the good effect of eliminating that objectionable clause.

DISGRACEFUL SOUTHPORT.

Some slight attempts have been made by a few Southport grocers jealous of their honour and of the public welfare, to induce the swindlers who label American lardy innutritious bacon as prime Wiltshire or Irish, to cease robbing the public and committing offences which the Merchandise Marks Act would punish, were Mr. Mundella and his satellites at the Board of Trade to do their duty. But as the tradesmen who commit these offences with impunity well know, they may go on defrauding the public and injuring English and Irish industries for ever for anything Mr. Mundella and his fellow idlers care. We have for over a year pointed out the barefaced frauds practiced upon the people of Southport, and complained that no samples of food stuffs are taken for analysis, and that adulteration is fostered by the Corporation of that town. We have refrained from touching upon its sanitary backslidings, upon the idiotic attitude of a Corporation that purchases sewer gas destroyers and allows them to remain unused because of a childish quarrel between a couple of sub-committees; of the frightful smells that are encountered in the main thoroughfares from sewer gratings, and of worse evils which the Corporation would be wise to take in hand at once lest a similar fate to that of Worthing befall Southport and its present thriving state, change to that of a deserted village, because we believed that there was enough public spirit in the town to insist upon municipal work being properly done. Apparently there is not. The class of gentry who will sell margarine as butter, acetic acid as vinegar, and American bacon as prime Wiltshire, naturally enough have no scruples about selling other articles for what they are not. Southport shrimps have a deservedly high reputation as being one of the dainties of delicacies, but as we pointed out some months ago, German shrimps are palmed off upon the public as Southport ones. The danger of this swindle has at length been emphasised in a striking manner. On the 16th inst. Mrs. Hulme, of Anchor-street, sent her boy to the shop of a well-known firm for a gill of shrimps. He was duly served, and five of Mrs. Hulme's six children partook of them at tea. About an hour or two afterwards they each returned home suffering from very severe pains in the stomach. Dr. Arthur Woods was communicated with, but was unable to attend. He, however, sent a recipe. During the whole of the night the children vomited a great deal. On Sunday they were slightly better, and on Monday some were almost well, while the weaker of the children were still ill. Dr. Wood visited them, and at once attributed the poisoning to the shrimps, which were German importations, and are very often stale on arrival at Southport, requiring as they do at least a week to reach that town. Several neighbours who also bought shrimps from the same shop were similarly affected. Important as is the Southport shrimp trade to that town, cases of this kind as about the most effectual methods of quickly ruining it. How many more warnings are needed to arouse this disgraceful Corporation to a sense of its duty to Southport ratepayers, honest traders, and the town's welfare?

THE CITY AND UNSOUND FRUIT.

The authorities acting under the Commission of Sewers are keeping a vigilant eye upon the retailers of unsound fruit, in consequence of the outcry against the sale of unwholesome fruit in the City streets. On the 18th, while a costermonger was plying his trade in Liverpool-street a barrow containing over 600 pomegranates was examined and condemned as unfit for human consumption. The man's stock-in-trade was, therefore, seized by an Inspector under the Public Health Act and destroyed. The fruit was purchased in Thames street and was in a very bad condition.

SEIZURE OF BAD RABBITS.

One of the Sanitary Inspectors of St. George's, Southwark, applied at the Police-court on September 18th, for an order for the destruction of a quantity of Ostend rabbits seized by him on the ground of being unfit for human food. They were in such a bad state that it was absolutely impossible to bring them. He had to sprinkle them with carbolic acid to prevent the stench. The magistrate gave the Inspector the required order.

DR. BELL'S REPORT.

The report by the principal of the Inland Revenue Laboratory for 1893 has been issued and says:—

"SALE OF FOOD AND DRUGS ACTS."

Fifty-one samples have been referred to us by the Magistrates under these Acts. They comprised milk, butter, lard, coffee, whisky, laudanum, pepper, and mineral waters. Thirty-seven of the samples, or three-fourths of the whole number, consisted of milk. The charge in 24 of the samples was for dilution with water; in eight for abstraction of fat; and in five both offences were alleged to have been committed. Of the samples alleged to contain added water, our results enabled us to support the charge in 22 out of the 24 cases; and of those where fat was alleged to have been abstracted, we were able to report in a similar way in seven out of the eight cases. Of the five samples where both offences had been charged we agreed fully with the Public Analyst in four of the cases, but only as regarded added water in the fifth. We could not concur in this case as to the second charge of abstraction of fat, as the sample had been purchased and was labelled as "skim milk," and as it contained much more fat than "skim milk" usually does we reported that, while the sample undoubtedly contained added water, it could only be considered as deficient in fat when compared with whole milk. Of five samples of butter two were alleged to contain foreign fat, and one excess of water; as to the other two, we are not aware what offence was charged. The last-named two samples corresponded in composition with genuine butter, as also did one of the samples alleged to contain foreign fat. In the other sample alleged to contain foreign fat, as well as in that where excess of water was charged, we concurred in the conclusions of the Public Analyst. In two samples of lard, one of whisky, one of laudanum, and one of pepper, we agreed with the Public Analyst. In one sample of coffee alleged to contain 94 per cent. of chicory, it was contended on the part of the defendant, who had had the coffee examined by another Analyst, that the percentage of chicory was very largely over-stated, and this we found to be the case. In three samples of mineral water, alleged to contain lead, we found that while lead was present, the quantity was extremely minute, and that the metallic contamination was principally tin.

CUSTOMS AND INLAND REVENUE.

The number of prosecutions during the year in which the Analysts of this department have been required to attend to give scientific evidence has amounted to 181, in which penalties amounting in the aggregate to £2,917 were imposed. In addition to the penalties, court costs have been awarded in many cases. The cases included 146 against publicans for dilution of beer; eight against brewers for untrue entry or non-entry of materials used, or for concealed wort; five against tobacco manufacturers, of which two were for excess of water, two for illegal flavouring matter in cigarettes, and one for having glycerine in possession; three against tobacco dealers for having smuggled Cavendish in possession; 14 for violation of the law in regard to methylated spirit; three for evasion of wine, beer or sweets licences; one for omission to use label on coffee mixture, and one for use of still without license.

THE LAW AND ROTTEN FOOD.

Mr. Bushby was sitting at the Worship-street Police-court, on September 14th, when Mr. Harvey, Sanitary Inspector for the parish of Whitechapel, brought into the yard of the court a coster's barrow laden with pears which he had seized as unwholesome and unfit for food, though they were being offered for sale in the street by a man against whom the Inspector applied for a summons. The pears had been brought to the court for the Magistrate's inspection and condemnation. Mr. Bushby declined to inspect them, and said he begged all Sanitary Inspectors in the district not to bring unwholesome things to that place. It was and had always been his habit to trust to sworn information as to the unsoundness of the goods complained of, and not to trust to his own observation. The Inspector said he understood the law required it. Mr. Bushby said it was not so, and read the 47th Section of the Public Health (London) Act, adding that he thought it was bad practice also to carry such things through the streets, from which they should be removed as soon as possible. On the evidence of the Officer and the Medical Officer he ordered the destruction of the pears, and granted the summons asked for.

SELLING METHYLATED SPIRITS WITHOUT A LICENSE.

At the Alfreton Police-court, on September 15th, Mr. W. H. Wilbraham, chemist, of Somercotes, was fined £10 and costs for having sold a pint of methylated spirits without a license on the 2nd of July last. The defendant, who was represented by his nephew, pleaded guilty. It was stated that the defendant's license expired on the 30th September last, and he had not renewed it. He said he was under the impression that he could sell small quantities without a license, although the local excise officer said he had warned him to the contrary. Mr. O'Brien, supervisor of Inland Revenue, said the Board considered this a bad case. Traders were allowed to use the spirits duty free—although they were in other cases subject to a duty of 16s. 6d. per gallon—in arts of manufacture, so as to enable them to compete against the foreigner in home manufactures.

TINNED LOBSTER POISONING.

On the 11th inst., the family of Mr. Leonard Adams, grocer, and confectioner, of Market-place, and Church-street, Cannock, partook of tinned lobster with their tea, and in a short time they were all more or less seized with illness. Mr. Adams, who had eaten heartily, soon developed signs of poisoning, and his wife, too, became ill. The services of Dr. J. K. Butter were requisitioned, and he found the cases so serious that he was not able to leave his patients until the early hours of yesterday morning. Fortunately the children had not eaten much fish, or they would probably not have recovered. It was only timely medical aid which saved the others.

ALLEGED BRIBERY OF A CORPORATE OFFICIAL.

At the Southern Divisional Police-court, Dublin, on September 14th, before Mr. Swift, Loughy Farrell, 16, Meath-street; John Sullivan, 1, Patrick-street; and Patrick Devitt, Bride's-alley, appeared in answer to a summons issued at the instance of the Corporation to show cause why information should not be taken against them for corruptly giving a gift of £1 to Timothy Lyons, Sanitary Officer, to induce him to refrain from giving evidence or to give untrue evidence on the hearing of a prosecution against the defendant, Farrell, for having sold adulterated buttermilk. Mr. Philip White (instructed by Mr. John MacSheehy) prosecuted. Dr. Falconer (instructed by Mr. John White) appeared for the defendants Farrell and Sullivan. It was agreed that the case against Sullivan should be proceeded with first. Mr. P. White said Farrell was a dairyman in Meath-street, and a prosecution was to be taken against him for selling adulterated milk. Inspector Lyons was the officer who had charge of the case. About three weeks after the alleged offence had been committed the following letter was received by the Corporation:—

[Private.]

"1, Patrick-street, 25th August, 1893.

"Dear Sir,—A particular friend of mine (Farrell's, Meath-street) had a sample of buttermilk taken by you, and as they have doubts about its purity, I would feel ever grateful to you if the matter could be squashed (with safety to you), as I would not like it to be brought into court. If this can be done you will find no further cause of complaint. I would personally call on you, but I am prevented by the illness of one of my young men. Mr. Hickey and Mr. Green are particular friends of mine. I enclose £1 to cover expenses attached to the case, and if more I will gladly pay them. Hoping you will excuse intrusion, I remain, yours truly,

"JOHN SULLIVAN.

"P.S.—A reply will much oblige.—J. S."

Although that letter was signed by Sullivan, it was believed it had been written by Devitt. A man named Jeremiah Douglas was asked to take the letter to Lyons, and Douglas did so. Under the Act of Parliament the defendants were liable to 2 years' imprisonment or a fine of £500. The consent of the Attorney-General had been obtained for the prosecution, and when evidence had been given he (counsel) would ask his worship to return the defendants for trial. Sullivan, he understood, was a publican, and a very well-to-do man. The defendant Devitt was, he believed, a law clerk. Timothy Lyons deposed that he is a sub-sanitary officer acting as a Food Inspector. The milk which he took for analysis at Farrell's was submitted to Sir Charles Cameron, after which a prosecution was ordered. On the 25th August witness met Devitt in North King-street. He handed him a letter, which witness returned without opening. The day after Jeremiah Douglas gave him the letter which counsel had read. It contained a £1 note, and witness handed over the letter and money to his superior officer, Mr. Halligan. In reply to Dr. Falconer, witness said he did not get the certificate of Sir Charles Cameron until ten or twelve days after he got the letter. No summons was issued until the certificate was first procured. Jeremiah Douglas, who said he was a commission agent, residing in the Portobello Hotel, was produced for the prosecution, but owing to the nature of his answers Mr. White was permitted to cross-examine him. Devitt, he stated, gave him the letter for Lyons. He denied he ever said that Devitt had no money, and that Sullivan must have given the £1. He also denied that the whole thing was arranged in Sullivan's. Witness said he had been made a tool of by Devitt. Dr. Falconer submitted that after this evidence there was no case against Sullivan. It was admitted that the letter was not in the handwriting of Sullivan, and there was no evidence to connect him with the transaction. Mr. White pointed out that the letter was written from Sullivan's address, and that it had been given to Douglas in Sullivan's shop. As regards the other two summonses counsel asked to be allowed to withdraw them as he feared the *fat* of the Attorney-General did not cover them. When he obtained the *fat* he could issue fresh summonses. Mr. Swift allowed this to be done, and gave three guineas costs in Farrell's case. He reserved his decision in Sullivan's case.

NOTICE TO SUBSCRIBERS.

Index to Volumes I. and II. is now ready, price 1s. Volumes I. and II., bound in cloth, gold lettered, with index complete, 7s. 6d. each, carriage paid. Postal Orders to be made payable to the Publisher, FOOD AND SANITATION, 183, Strand.

ADULTERATION PROSECUTIONS. BUTTER.

At Market Harborough Petty Sessions, on September 12th, George Raiment, of Humberstone-gate, Leicester, provision dealer, was charged by Superintendent Shilcock with selling adulterated butter at Market Harborough on August 22nd. Mr. Winterton was for the prosecution, and Mr. Rawlins defended. Superintendent Shilcock said he saw a youth named John Matthews call at several shops in Market Harborough, and eventually hand some butter out of his basket to Mrs. Garner at the pork shop. Witness asked what he had sold to that lady. Mr. Rawlins objected to the answer being given until the agency had been proved, and Mr. Winterton acquiescing, John Matthews, of Stoughton-street, Leicester, was called and stated that he was employed by defendant to assist at markets, and in taking the goods out. On August 22nd he took a mixture of butter to Harborough for Mr. Raiment. Superintendent Shilcock then stated that the boy Matthews told him he had sold 2 lbs. of butter to the lady at the shop. Witness said he wanted a pound, but the lad told him he could not have it as it was all ordered. Witness advised him of the consequences of refusing to supply him, and stated that he wanted the butter to send to the Public Analyst, and the boy took a pound from his basket saying it was fresh butter, and was 1s. 1d. a pound. Witness paid him and divided the butter in the usual way. Whilst in the act of dividing the butter Mrs. Garner came into Mr. Webster's shop with the two pounds of butter in her hand, threw it on the counter before the boy, and said Mr. Rawlins objected, remarking that the charge laid in the information was for selling to the Superintendent. The objection being allowed, witness said the lad remarked that the butter belonged to his mother, of 52, Stoughton-street, Leicester. Witness detained him until he wired to Leicester, and the reply negating his accuracy, the boy then said, "The butter does not belong to my mother but to Mr. Raiment, 92, Humberstone-road," in whose employ he had been about six months, and that he attended Hinckly and other markets in the county and sold butter for him. On August 30, witness received a certificate from Dr. Emerson that the butter was adulterated with 90 per cent. of foreign fat. Witness received on August 25 a letter from defendant denying that Matthews was in his employ, and adding that he had made an assignment for the benefit of his creditors. The trustee allowed him (defendant) to conduct the business for his youngest son. Nothing was known by the youth or the public of his having made an assignment until the statement appeared in the *Leicester Mercury* on the previous night. He (defendant) was only a servant of the trustee and had instructed the youth to sell the butter as a mixture. J. Matthews stated that on the day named he was sent to Harborough by defendant with a mixture of butter. Mr. Raiment's son paid him his wages for the last three weeks. Mr. Winterton proposed to read a statement said to have been made by the witness to Detective-Inspector Mantle, but Mr. Rawlins objected on the ground that he was unable to cross-examine that evidence, and Mr. Winterton thereupon asked witness if he stated to the officer that he was to sell the butter as fresh butter and at market price, and that if anybody asked him he was not to supply it? Witness said he was not to supply it as butter. He was also asked if he said that if a policeman wanted to buy he was not to let him have it. Witness: I was not to let him have it as butter. He however told the superintendent it was butter. By Mr. Rawlins: If he sold the butter at 1s. 1d. per pound he was allowed a penny in the pound commission, but if it only realised a shilling he received a halfpenny in the pound. He meant that he took the butter to his mother's house before starting for Harborough. Detective-Inspector Mantle said defendant denied having sent the boy to Harborough, averred that he knew nothing about it, and turning to the boy, who was present, said, "Do I boy?" The boy said, "Yes, you sent me over to-day; you packed 14lbs. of butter yourself, and told me to take it to Harborough and sell it as fresh butter at market price." Defendant then said, "Well, I did send the lad. I know it is not butter, but a mixture. I have so much on hand I don't know what to do with it." He added, "But you cannot do anything at me, I am in liquidation." Mr. Rawlins submitted that defendant having made an assignment he was placed in the position of manager by the trustee for the benefit of creditors, and which he contended furnished a conclusive answer to the charge. He called upon defendant to give evidence, which was to the effect that he was engaged by the trustee to manage the business and take £1 a week for his (defendant's) services. Matthews was not his servant, but his son's. He had no interest in the business since July 31. Fined £10 including costs.

At Cork, on September 18th, Sergeant Ralph prosecuted Cornelius Cronin, Waterfall, for selling butter containing five per cent. of added water, and only 67 per cent. of fat, the Analyst stating there was an excess of salt in the sample. A fine of 20s. and costs was imposed. Mr. Mayne asked Sergeant Ralph how long was it since he had been appointed Inspector under the Act. Mr. Galvin said since June last. Mr. Mayne said he was glad to see these duties taken up by the police. Mrs. Connell and Mrs. Realey were also prosecuted for having sold butter adulterated with water. In the first case the butter contained but 70 instead of 80 per cent. of fat, and also 8 per cent. of added water, whilst in the second case the butter contained 12 per cent. of added water. Mr. Clanchey said that during the month of August butter was so soft it was impossible to get the water out of it. He thought the second portion of samples taken for this purpose should always be sent to Somerset House for analysis, as that was the only security people had. Mrs. Realey was

examined, and deposed she merely bought the butter in prints and sold it without having handled it in any way. Mr. Clanchey said that Somerset House allowed 18 or 19 per cent. of water in butter, but in both cases before the court, the quantity of water was largely in excess of that. Mr. Galvin asked for a substantial penalty in each case. In the first case the Bench imposed a fine of 20s. and costs, or in default 14 day's imprisonment, and in the second case a similar penalty was imposed. Mr. A. Blake, solicitor, appeared for the defence.—Mrs. Dennehy, Church-street, was prosecuted for refusing to sell butter to the Sergeant for the purpose of analysis. She had been previously fined twice for selling adulterated butter. The defendant said she offered butter to the Sergeant, but Sergeant Ralph said Mrs. Dennehy would not sell him the butter he wanted. A fine of 10s. and costs was imposed.

At Glasgow Sheriff Summary Court, on September 14th, before Sheriff Spens, Mrs. Julia Mitchell, 184, Castlebank-street, Partick, and Miss Jane G. McOandlish, 38, Anderson-street, Partick, were each fined 5s., with 5s. of expenses, for exposing margarine for sale by retail in their shops without having attached to it the label prescribed by the Act. A similar penalty was imposed upon Miss Phyllis Nelson, 5, Gordon-street, Whiteinch, for selling half-a-pound of margarine without delivering it in the prescribed wrapper.

WATER IN BUTTER.

At Cork Police-court, on September 15th, the trustees of the Cork Butter Market prosecuted Daniel O. Casey, of Scartaglin, County Kerry, for having sent to the butter market for sale a firkin of butter containing an undue quantity of water. Mr. Mayne said that the Analyst's certificates showed that the butter contained 22 per cent. of water, which, according to Mr. Clanchey's statement on Wednesday, was only three per cent. in excess of the Somerset House standard. Mr. R. N. Byrne, solicitor for the trustees, said that the object of the trustees in bringing such prosecutions was to show to the English public and the general public that any butter containing an undue quantity of water could not escape detection when passing through the market. Mr. A. Blake, for the defendant, pleaded guilty, and said the excessive heat of the weather was the cause of the abnormal quantity of water in the butter. The Bench did not consider the case a bad one, and did not order the confiscation of the butter whilst imposing a fine of 10s. and 20s. costs.

MUSTARD.

At Neath Borough Police-court, on September 11, Susannah Baldwin, grocer, Mackworth-lane, Neath, was summoned for selling mustard not of the quality prescribed under the regulations. Mr. H. P. Charles defended. Inspector Thomas stated that on August 4 he visited the defendant's shop and asked for three-pennyworth of mustard. The result of Dr. Morgan's analysis showed that there was 75 per cent. of genuine mustard and 25 per cent. of flour, &c. Mr. Charles: You could have read the label if you had wanted? Yes. Have you ever taken the trouble to read the section of the Act of Parliament with respect to the labels on such goods? Yes. Which states that the vendor need not call the attention of the purchaser to the label? Yes. You know that there is genuine mustard which is mixed with flour, &c.? Yes. And you knew that before you went into this shop? Yes. Are you aware of the fact that there have been several summonses dismissed on this particular question? Yes, and several convictions. Where, sir? Pontypridd. Mr. Charles contended that there had been abundant cases in which it had been decided that pure mustard was of a bitter taste and always went black when kept some little time. The label on the box, "Messrs. Moss & Co. (Lim.), mustard condiment. Take notice. This preparation is sold under the Food and Drugs Act, 89 Victoria, chapter 62," was, he contended a sufficient answer to the case. The Bench dismissed the case. Mr. Charles applied for an advocate's fee. The Bench granted the application, but at the same time they wanted it to be understood that it must not be established as a precedent.

At Louth Petty Sessions, on September 6, Mr. William Rowe, grocer, Kelstern, was summoned for selling mustard not of the nature, substance, and quality demanded. The prosecution was taken under the Food and Drugs Act of 1875. Mr. W. H. Gane, of Boston, who appeared on behalf of defendant and the manufacturers, objected to the summons on the ground that under 42 and 43 Vic., section 10, the particulars of the offence complained of ought to have been stated to the defendant. The Bench eventually dismissed the case, remarking that there was a great deal of doubt on the point.

COFFEE.

At the West Riding Police-court, at Wakefield, on September 15th, William Sheard, grocer, Belle Vue, and the Wakefield Industrial Society (Limited) were charged with selling adulterated coffee. Mr. Talbot Kyle, Inspector under the Food and Drugs Act, in the service of the West Riding County Council, who appeared in support of the summonses, said he purchased some coffee at both places, and on its being analysed Mr. Sheard's was found to contain 50 per cent. of chicory and the Industrial Society's 60 per cent. Mr. Sheard had £3 to pay. The other case was dismissed on payment of the costs.

BEER.

At the Thames Police-court, on September 15th, a licensed victualler was summoned at the instance of the Excise for selling beer adulterated to the extent of 2½ gallons of water to the barrel of 36 gallons. Mr. Maitland, on behalf of defendant, pleaded guilty, and said his client was away at the time. Mr. Mead imposed a fine of £10.—Another trader, who was summoned for a similar offence, was also fined £10. Both gentlemen contrived to keep their names out of the papers.

BRANDY.

At Gosport, Mr. Enoch Riddock, was summoned on the information of George Barton for selling, on the 10th August, brandy adulterated with water 28.52 degrees underproof, pleaded not guilty. Mr. George Barton, sergeant of police at Romsey, said that on the 10th of August he visited defendant's house, the North Star, on the Fareham-road. Defendant's wife served him with three pennyworth of brandy. He then called for half a pint of brandy. Mr. Burton (the Clerk): Then you drank the 8d. worth, I suppose? Witness (indignantly): Oh, no, I did not. Witness said he paid 2s. for the brandy, and afterwards divided it into three parts, as usual. The Analyst's report showed that the brandy was 28.52 degrees under proof. The sample was an admixture of 95.2 parts of brandy with 4.8 parts of water. The defence, for which several witnesses were called, was that someone had been tampering with the spirit. Defendant said he had lost cigars and three quarts of the best brandy from the bar. The Bench said it was not a very serious case, and ordered defendant to pay the costs, 6s.

WHISKY.

Sam Bradley, landlord of the "Horse and Groom," Linthwaite, was charged with selling adulterated whisky on August 8th, and William Hayes, landlord of the Ivy Hotel, Linthwaite, was summoned for a similar offence on the same date. In the first case Mr. A. L. Bridge, Inspector under the Food and Drugs Acts, stated that he visited the defendant's house and purchased half a pint of whisky for which he paid 1s. 3d. Having informed defendant of his intention, he sent a third of the whisky to the Public Analyst, who had certified that it was 27.7 degrees under proof, whereas the minimum should be 25 degrees, so that the dilution was 2.7 degrees in excess of that allowed by the Act. Defendant, who pleaded guilty, attributed the fact of the whisky being more than 25 degrees under proof to evaporation. There was not so much whisky drunk in summer as in winter, and he was not aware but that what he was selling was all right. The Bench did not believe that there had been any attempt to sell an improper article, and imposed a mitigated penalty of 10s., with 19s. 6d. costs.—Mr. F. A. Reed (Messrs. Learoyd and Co.) appeared for the defendant in the second case. The whisky purchased by Mr. Bridge at the Ivy Hotel had been certified to be 31 degrees under proof, or six degrees lower than the Act allowed. Mr. Reed said he thought the Bench would come to the conclusion that this case also was clearly one of misfortune, and not of any desire to do anything contrary to the statute. The defendant was a member of the Linthwaite Local Board, and felt his position most acutely. He could only attribute the fact of the whisky being 31 degrees under proof to the defectiveness of a testing machine which he had used, and which he had since replaced with a new one. The Chairman said it was very gratifying to find that in both of the cases which had been brought before them there had been nothing of intentional or wilful selling of an article which was deleterious, but there was no doubt the statute had been broken, and they imposed the same penalty in the second case as in the first.

At Thornaby, on September 4th, T. Fail, of the Oddfellows' Arms, Old Thornaby, was fined two guineas and costs for selling adulterated whisky. The official analysis showed 26 per cent. more of water than allowed by the Act.

At Neath, on September 11th, John John, landlord of the Greyhound Inn, Water-street, was charged with selling whisky 36 degrees under proof on the 4th inst. The Inspector of Foods and Drugs gave evidence as to purchasing a sample, and the Public Analyst's report, showing that the whisky was 36 degrees under proof, was put in. Fined 10s. and costs.

At Mansfield Petty Sessions, George Radford, publican, Skegby, was summoned for having sold whisky adulterated with 14 parts of water, on the 10th ult. Mr. Story, who prosecuted, said the whisky was adulterated 10 per cent. beyond the 25 per cent. allowed by law. Fined £2 and the expenses.

At the Middleton Petty Sessions, on September 14th, before General Dennahy, Messrs. B. Harvey, R.M.; J. Penrose Fitzgerald, and T. M. Cummings, Sergeant Byrne summoned Denis Riordan, publican, at Lisgoold, for alleged adulterating whisky. Sergeant Byrne deposed that he purchased a pint of whisky, which the barmaid sold him. He sent a sample to Mr. W. B. Harrington, Cork, whose certificate showed that the sample was free from methylated spirit, and contained nothing foreign to whisky, and the extract matter was normal as regards character and quantity, the strength deficient being 32 degrees under proof. The Sergeant further stated that the statute did not allow the whisky to be reduced more than 25 degrees, whereas, the sample analysed showed it to be 32 degrees under proof. The defendant said he did not know what quantity of water he was entitled to add to the whisky whenever overproof to bring to the proper degree, as required by law, and was not aware that he was committing any offence. Their worships decided on fining the defendant in a mitigated penalty of 2s 6d and costs, and cautioned him against a repetition of the offence.

At Kinsale Petty Sessions, on September 9th, Sergeant Anderson, Inspector under the Food and Drugs Act, charged two publicans—Mrs. Catherine Kenefick, Market-place, and Miss Hannah Dempsey, Main-street, Kinsale, with selling whisky which was not of the quality of the article demanded. The Sergeant gave evidence of the purchases by him from both defendants on the 26th August last, and of forwarding samples to Mr. W. B. Harrington, Cork, County Analyst. In consequence of the whisky supplied by Mrs. Kenefick being so little under the necessary strength, the magistrates imposed only a fine of 5s., but in Miss Dempsey's case, which they considered a bad one, they fined her £5.

MILK.

At Marylebone, on September 15th, Alfred John Pocock, of Blenheim-gardens, Willesden-green, appeared before Mr. Plowden to answer four summonses taken out by the Hampstead Vestry for selling milk adulterated with added water to the extent of 6, 7, 7, and 12 per cent. respectively. Mr. Jennings, solicitor, prosecuted for the Vestry; Mr. Ricketts, solicitor, watched the case for Mr. Batho, to whom the milk was consigned; and Mr. Armitage, solicitor, was for the defendant. The evidence was that, on the 23rd August, Inspector Edmonds took samples of the milk as the defendant delivered it at 283, High-road, Kilburn. The samples were submitted to Mr. Stokes, who analysed them, with the results above stated. Mr. Batho said his contract with the defendant was that the milk was to be pure and with all its cream. He had samples taken owing to complaints from customers. Cross-examined: The percentage of water in milk drawn from a "stale" cow would not be larger, although the quantity of milk yielded might be less. Mr. Stokes said he was accustomed to analyse from 15,000 to 20,000 samples of milk each year. Cross-examined: "Stale" cows produced poorer milk than the average cow. Mr. Plowden: What is a "stale" cow? Mr. Stokes: When a cow has not had a calf for a long time, and is giving up yielding milk. The quality then is less. Mr. Jennings: Would it be as much as twelve per cent.? Mr. Stokes: Certainly not. We take the milk of the "stale" cow as our standard in testing ordinary milk. Mr. Plowden: What is the handicap on a "stale" cow? (a laugh.) Mr. Stokes: Five per cent. below the average. Cross-examination continued: The dryness of a season would, of course, make a difference to the milk. Mr. Armitage: Is there any means of showing the difference between water added to milk and the amount of water in milk from a "stale" cow? Mr. Stokes: Water is water, and you cannot distinguish it. Mr. Plowden: Are you satisfied that water has been added to this milk? Mr. Stokes: Yes, I am quite clear about that. The defendant gave evidence on his own behalf, and said he had 25 cows, from 15 to 20 of which were "stale." Ten of them had since been sold, and others purchased to take their place, giving more and richer milk. Mr. Armitage said the defence was that the milk was from a "stale" cow, and was affected by the dryness of the season. Mr. Plowden, in giving his decision, said that before this year there had been no difficulty in deciding these cases, but the abnormal heat of the summer had made a difference. The decision he gave in the case before the Court last week had been taken advantage of in other cases, as was the popular defence when influenza was prevalent of pleading that disease as an excuse. The scientific evidence proved in this case the presence of twelve per cent. of added water, and an attempt had been made to get over that by not only pleading the dryness of the season, but also the staleness of the cows. The latter could not possibly be accepted, because the defendant was not obliged to keep stale cows, or, if he did, he should not have entered into contracts to supply pure new milk. The defendant was fined 40s., with 44s. costs.

At Greenock Sheriff Court, on September 12th, James Mark, farmer, Smith Dennistoun, Kilmacolm, was charged with having on the 15th ult. sold a pennyworth of sweet milk which on analysis was found to contain 8.7 per cent. of added water. He pleaded not guilty, but was convicted. Having been three times previously convicted, Sheriff Black imposed on him a penalty of £8.

EXTRAORDINARY MAGISTERIAL IGNORANCE.

At Penarth, a milk vendor, named Phillips, was charged with selling adulterated milk on the 29th July. Mr. T. H. Belcher defended. The Analyst, in his report, stated that the sample submitted to him consisted of 50 per cent. of genuine milk and 50 per cent. of skimmed milk. Mr. Belcher contended that the milk was guaranteed to be pure when purchased from a farmer named Henry Bowen, Hereford. Defendant was then placed in the box and emphatically denied any knowledge of adulteration. The Bench considered that the milk was delivered in the same condition as received, and they regarded that as a valid warranty. They dismissed the case.

At Neath, on September 11th, J. Ellis, coal merchant and milk vendor, Melinorythan, and J. Scholard, Melinorythan, were respectively charged with selling adulterated milk, and on conviction each was fined 5s. and costs.

At Teddington Petty Sessions, on August 28th, Owen Older, Island Farm, West Molesey, was summoned for selling, as new milk, a quantity of milk from which 25 per cent. of its fat had been abstracted. Mr. Edward Watkins having proved the purchase of the milk, Mr. Walter Tyler, District Inspector under the Food and Drugs Act, said that he sent a sample of the milk to the Public Analyst, who stated that 25 per cent. of the fat having been abstracted, the article was only skim milk. Witness added that he had taken many samples previously from the defendant, and had always found them correct. A fine of £3, including costs, was imposed.—Edward White of Broad-street, Teddington, was summoned for selling a quantity of milk which contained 8 per cent. of added water. The case was similarly proved, but the defendant said he sent out the milk in the same state he obtained it from the cows, and he produced the report of a case in which a summons was dismissed owing to the fact that the feed for cows this year was insufficient. He alleged that this was the cause of the poorness of his own milk. The Chairman said the defendant would be fined £5, including costs, as he had been previously convicted.

At Thornaby, on September 4th, Joseph Simpson, milk seller, South Bank, was fined two guineas and costs for selling milk containing 53 per cent. of water at the Stockton Races.

At Leicester, Joseph Harrison, farmer, Pailton Pastures, Leicester-shire, was summoned on two informations for selling adulterated milk to the Farmer's Milk Supply and General Produce Company, Limited, on the 15th August. He pleaded not guilty. The Town Clerk (Mr. J. Storey) who prosecuted, stated that two cans of milk were sent to Leicester by defendant in pursuance of a contract with the dairy company. They were met at the railway station by an Inspector, and samples were taken and sent to the Analyst, who certified that one contained 10 and the other 11 per cent. of added water. Evidence was called in support of the Town Clerk's statement. Defendant said he did not know the milk was adulterated. He could not be always there to look after it. Mr. Stafford said defendant appeared to take an easy view of it, but it was a very serious thing for the public, and for little children who had to drink milk. Defendant was fined £5 in each case.

At Newrk District Petty Sessions, on September 13th, before Captain Oates, Mr. E. A. Wilson and Mr. F. Platt, Frederick Speed, Balderton, was summoned for selling a certain article, to wit, milk, at Balderton, on August 16th, which was not of the nature demanded by the purchaser. Mr. Norledge defended, and pleaded not guilty. Inspector Garforth said that he purchased a quart of milk from Ada Speed, daughter of the defendant, at Balderton, on August 16th. After the purchase was completed he informed her that he was an Inspector under the Food and Drugs Act, and divided the milk into three parts, giving the girl one part of the sample in a bottle back again. The second one he sent to the Public Analyst, and the other he produced. The Analyst reported that the sample was 83 parts milk and 17 parts added water. Mr. Norledge relied for his defence upon the judgment given in a recent London case, where milk taken direct from the cow showed by analysis 9 per cent. apparent added water. He read a lengthy extract of the report of the case, and contended that the hot season and poorness of the pastures resulted in a diminution in the solids and fats of milk. The Bench decided to hear the further cases before giving their verdict.—Eliza Mather, milk seller, Balderton, was then charged with a similar offence on the same date. The analysis proved the milk to contain 10 per cent. of water.—George Nicholson, another Balderton milkseller, was also charged. The analysis of his milk showed 10 per cent. of added water.—Richard Brown, cowkeeper of the same place, also appeared to answer a similar charge. His sample of milk showed 20 per cent. of added water. The Bench said the cases were rather difficult, and they were of opinion that it might be possible that in such weather milk might appear as if adulterated up to 10 per cent. and therefore the cases against Mather and Nicholson would be dismissed. The other two defendants would have to pay £1 10s. each including costs.

At Preston Police-court, on September 5th, Joseph Pennington, of 5, Albyn-street East, was summoned for selling milk adulterated with water. The Town Clerk (Mr. H. Hamer), prosecuted. William Norris, clerk in the Medical Officer's Department, stated that on July 31st, he visited defendant's premises. Defendant's wife was in the shop, and he asked her for a quart of new milk. This he received after paying her 2s. for it. Inspector Marsden said he instructed the last witness to go for the milk, and while he was in the shop witness also went in. He told Mrs. Pennington that it was his intention to have it analysed. From the certificate with reference to the milk from the Public Analyst, it appeared that there was 6 per cent. of water in the milk, which was of the very poorest, having been deprived of nearly the whole of its cream. Dr. Pilkington, the Medical Officer of Health, said he sent to test the milk at the defendant's premises, because there had been a great deal of diarrhoea in the district. Adulterated milk might have been the cause of that, and if a child, while suffering from diarrhoea, were given adulterated milk, it might militate against its recovery. Defendant was fined a small sum, or in default one month's imprisonment.—Thomas Higginson, of 48, New Hall-lane, was also summoned for having in his possession adulterated milk, which was intended to be sold. The evidence for the prosecution was to the effect that on the 31st of July a quart of milk was purchased at defendant's shop, and afterwards analysed. It was then found that it contained 10 per cent. of water. Ellen Higginson and Mary Crook, witnesses for the defence stated that the milk was what was called "skim" milk. Defendant was fined 30s. and cost, in default one month.

At Bulth, on September 11th, Edward Davies, of Velindre House, was fined £2, including costs, for adulterating milk to the extent of 18 per cent., and Roger Davies, of Caepandy, was similarly fined for adulterating milk to the extent of 9 per cent.

THE FORM OF SUMMONS.

At Rugby Petty Sessions, on September 5th, before B. H. Wood, B. H. Shuckburgh, and T. S. Townsend, Esqrs., John Smith, milkman, Victoria-street, New Bilton, was summoned by Mr. W. H. W. Parsons, Sanitary Inspector to the Rugby Local Board, for selling to him at Rugby, on June 23rd, a quantity of milk not of the quality demanded. This case had previously been twice adjourned in consequence of the illness of the Inspector. Mr. Wratlaw represented the Local Board, and Mr. Peagam attended for the defendant, who pleaded not guilty. Mr. Wratlaw said the defendant sold the milk to the Inspector in the street, and that was a sale within the meaning of the Act. Mr. Parsons stated that on the day named he saw the defendant with his milk cart in Albert-street, and purchased from him half-a-pint of milk, which he informed him was for analysis by the Public Analyst. Defendant did not stop for the portion of the milk which the law required should be left with him, but told witness to give it to his boy. Witness paid a penny, which was the proper price for half-a-pint of new milk. A portion of the milk was sent to the Public Analyst, who certified that it was adulterated with 12 per cent. added water. Mr. Peagam asked the

Bench to dismiss the summons, on the ground that the summons did not disclose the particulars required by the Act of Parliament. He quoted a case of Barnes, appellant, v. Ryder, respondent, heard in the Queen's Bench Division, wherein it was stated that the summons ought to have contained particulars of the alleged defect in the milk or stated in what manner it had been adulterated, as, for example, whether water had been added or fat abstracted. In giving a decision in favour of the appellant, Baron Pollock stated that the Magistrates ought in the first instance to have dismissed the case. Justice Hawkins agreed, and said it ought to be stated in the summons what the defect in the milk was. Mr. Seabroke said this case was reported after the summons in the present case was issued. Prior to the publication of the case the particulars stated in the present summons were held to be sufficient. Mr. Wratlaw asked for the case to be adjourned, so that the summons might be amended. Mr. Peagam said that might be done in a case where there was a variance in the wording of the summons, but in this instance it was an omission altogether, therefore the summons could not be amended. After a long consultation with their Clerk, the Magistrates adjourned the case for a week for further consideration, and on the application of Mr. Peagam, the Bench ordered the prosecutors to pay the costs of the day.

At the Oldham Police-court, on September 4th, (before Mr. A. Crompton and other Magistrates), Henry Fisher, of Whitely Hey Farm, near Macclesfield, was summoned for a breach of the Food and Drugs Act. Mr. Cook, Deputy Town Clerk, prosecuted, and said that the Sanitary Committee were anxious to get at the first cause of adulteration, and for this purpose the sample of milk was taken upon its arrival at Clegg-street Station. Inspector Thomas said on the 28th of July he went to Clegg-street Station, and took a sample of milk consigned to John Brunt, who was present at the time. He took the sample to Mr. Estcourt, Public Analyst, at Manchester. The latter gentleman's certificate showed that 2 per cent. of water had been added, and 30 per cent. of fat abstracted. Witness saw the can of milk arrive, which no one interfered with. John Brunt said he was a milk dealer, living in Rochdale-road. He had purchased from the defendant what ought to have been new milk for some time. On July 28th, he went to Clegg-street Station to receive the milk. He supplied ten or eleven other people with milk to retail. Witness took the can of milk, some of which he sold to private houses, and a quantity he served out to his wholesale customers. The defendant had since seen witness, and he (defendant) saw the sample, which he said was "too far gone" to test.—Mr. Cook pointed out that Mr. Brunt and the eleven other wholesale dealers could have been summoned for selling the adulterated milk, and that was why the authorities wished to get hold of the farmer. Mr. Brunt, recalled, said, in reply to the Bench, that he had received no complaints about the milk being poor. The Chairman: The other people who bought the milk from Brunt to retail again would only take a small quantity. Mr. Cook: It does not matter how much it may be. Defendant said his milk had been frequently analysed, but the present was the first occasion upon which it had been found not to be pure milk. He had only seven cows and believed the milk was poor because the cattle had been put in a fresh meadow. He had never adulterated the milk in his life, or taken away any fatty matter. It must have been entirely owing to the fresh grass the cattle had been put in. The Bench considered the case fully proved, and the Chairman said they were glad to see that the authorities were taking this course. It was very wrong that people should be persuaded that they were having pure milk when really 30 per cent. of the good qualities of the milk had been abstracted. A fine of £5 and costs would be imposed. The costs of the Analyst's certificate and of the witness Brunt were also allowed.

At Cork Police-court, on September 18th, Sergeant Ralph prosecuted Mrs. Sullivan, Douglas, for having sold new milk containing 8 per cent. of added water. The defendant had been engaged in the business for 20 years, and though several analyses had been made during that time, of milk sold by her, it was always found correct up to the present case. The defendant said she could not account for the water except by the soakage of rain water through the lining round the cover of the churn. The case was not considered an extreme one, and the Bench imposed a fine of 10s. and costs. Dr. Dunlea appeared for the defendant, and Mr. B. C. Galvin prosecuted on behalf of the Corporation.

Mrs. Ellen Dennehy, Twomey's cottages, was prosecuted for selling milk containing 6 per cent. of added water. The defence was that the woman purchased the milk from Mr. John Donovan, Kellens, with whom she had entered into an agreement to have a certain quantity of new milk supplied to her daily. There was a case pending against Mr. Donovan for selling adulterated milk on a subsequent date, and under the circumstances the case against Mrs. Dennehy was adjourned. Dr. Dunlea appeared for the defendant.

Food and Sanitation,

THE ANTI-ADULTERATION JOURNAL;

To protect the Public from Adulterations of every kind. A Newspaper to support English, Irish, Scotch and Welsh Industries, and to suppress Foreign Free Fraud in all imported articles. A Journal for manufacturers, Merchants, Wholesale and Retail Traders, Grocers and Provision Dealers, Dairy Farmers, English and Irish Produce Merchants and Bacon Curers, Pure Beer Brewers, Distillers, Fruit Growers, and Agriculturists.

Published Weekly by M. HENRY, at 183, Strand, London, W.C. Subscription per annum, Post Free, 6s. 6d.

UN SOUND FOOD.

At West London, on September 15th, Mr. Denselow, Clerk of the Fulham Vestry, applied to the Magistrate for an order to condemn two bushels of pears which had been seized while exposed for sale by a costermonger in North-end-road. Mr. Curtis-Bennett said he must have some evidence of the pears being in an unsound state. Dr. John G. Jackson, the Medical Officer of Health for Fulham, said he had seen the pears and was of opinion that they were unsound and unfit for food. Mr. Curtis-Bennett left the Bench to inspect the pears, which had been brought to the yard of the Court, and on returning said they were in a very bad state. He made an order for the pears to be destroyed, and granted a summons against the costermonger for the exposure for sale.—William Reginald Bradburn, of the Broadway, Walham-green, was summoned in respect of a rabbit which was alleged to have been sold in a putrid condition. The defendant, after Dr. Jackson had proved that the rabbit was in a putrid state, contended that it could not have gone bad in the time. He said he was convinced that it was perfectly sound, and he applied to have a piece of cook to produce in Court, but he was refused. Mr. Curtis-Bennett said it was one of those animals which it was most dangerous to eat, especially when cholera was about. He imposed a penalty of £5, with costs.

Jonathan Richardson, pork butcher, 74, Ellor-street, Salford, was summoned before Mr. J. Makinson and other Magistrates, charged with exposing for sale a quantity of unsound meat, including four hams and a side of veal. Mr. A. Holmes, Deputy Town Clerk, prosecuted, and Mr. Somers defended. Mr. Holmes said the whole of the meat seized by the Inspector was in a very bad state and the stench from the veal almost made him sick. Considering the amount of sickness, especially diarrhoea, there had been in this neighbourhood, it was important that the public should be served with wholesome food. Mr. A. W. K. Fordham, Meat Inspector for the Corporation, said he visited the defendant's shop on the 16th August, and found there a side of veal unfit for food and four hams and some meat in pickle in the cellar. For the defence it was urged that the meat had gone bad in consequence of the hot weather, and that he had sent for a "pig man" to come and take it away, but he had neglected to do so. Defendant was fined 10s. 6d. and costs, including 10s. 6d. special costs.

THE LAW AND PUBLIC HEALTH AT FORFAR.

Chief Constable Stirling, as Sanitary Inspector of the Burgh of Forfar, petitioned Provost Doig and Bailie M'Dougal, on August 29th, to the effect that on 28th August, within No. 8 killing booth of the shambles, there was found, examined, and seized the carcass of a beast intended for human food, and which had suffered from anthrax. The animal belonged to Mr. Wm. Thom, farmer, Auchterforfar, near Forfar. Mr. Inglis, V.S., Forfar, appeared, and stated that Mr. Thom left the matter in the hands of the Court, and he would agree to any decision they might arrive at. The Chief Constable: When I examined the animal I found it had been suffering from anthrax before being killed. The carcass was brought to Forfar Slaughter-House in a cart on Saturday. The Provost: How did Mr. Thom think of bringing in a dead animal? The Chief Constable: I think Mr. Thom is guiltless in the matter. His cattle had been grazing in a park amongst other strange beasts on Friday night, and, as the result of fighting, this animal in question was injured. Mr. Thom's brother, on noticing the animal in an apparently dying condition, went and cut its throat, and afterwards sent the carcass to Forfar, unknowing that it had suffered from any disease. The Provost: If the beast had been fighting there would have been marks about it. Mr. Inglis, V.S.; Mr. Tait, V.S.; and Dr. Murray, the Medical Officer of Health for the burgh, all agreed that the animal had suffered from anthrax. Dr. Murray: The disease is so sudden in some cases that a few hours would cause death. The Provost: The County Authorities have satisfied us that they are to pay the expenses of the destruction of this carcass. Dr. Murray: I don't think that the burying of the carcass is sufficient for destroying the disease here. The Provost: The Act says to bury it six feet under the surface of the earth, and cover it with quicklime. Mr. Murray: It is not sufficient in this case. We have had an instance where it was six years buried, and the spores came up with the earthworms. The carcass should be burned. The Provost: The Act gives us the power either to bury or burn the carcass, or send it to a knacker's yard. What are we to do with it? The Chief Constable: Remit it to me and Mr. Tait, the County Inspector, and we will destroy it in terms of law. The Provost: The Local Authorities of the county and burgh must be guided by the Acts laid down, and those who framed the Acts are responsible for any insufficiency. Dr. Murray: I wish to call attention to the fact that burying is not sufficient here. The Provost, addressing the keeper of the shambles, instructed him to be very careful in the inspection of dead carcasses before admitting them within the gates. The County Clerk had advised that the carcass should be destroyed where it was, instead of being carried hither and thither, which might result in spreading infection. The county have undertaken to pay all expenses. Dr. Murray: In future I should think it would be unsafe that dead meat should lie in the slaughterhouse. We are not allowed to permit it. You should refuse to admit dead meat altogether. The Chief Constable remarked that he had ordered the killing booth in question to be thoroughly disinfected, and that nothing should be put in it until that was done. It was thereafter remitted to the Chief Constable and Mr. Tait to see to the destruction of the carcass.

At Liverpool, on August 30th, Elizabeth Woodward, 194, Park-road, was fined 30s. and costs for exposing for sale at her shop two pieces of beef which were unfit for food. Inspector Jones proved the case.

ANALYSTS REPORTS.

At a meeting of the Sanitary Committee of the Dundee Police Commission, on September 12th, it was reported by Mr. Macdougald, City Analyst, that he had examined one sample of milk during the past three months, and found it to have been adulterated with skimmed milk to the extent of 10 per cent.

CARDIGANSHIRE COUNTY COUNCIL.

Dr. Snape, the County Analyst, reported that during the quarter 20 samples of food and drink were submitted to him for analysis, viz., nine of milk, six of whisky, two of bread, one of beer, one of brandy, and one of preserved green peas. The analysis showed adulteration of milk in four cases, of whisky in one, and of green peas. In five of these the vendors were proceeded against, convicted, and fined. The Clerk read a letter from the Aberystwyth College authorities, stating that the college had been asked by the Montgomeryshire County Council to appoint a special analytical chemist who could periodically visit different places and confer on scientific agriculture with the farmers, and also analyse seeds, soils, foodstuffs, &c., at a small fee. There was a further request that a laboratory should be opened at the institution where analyses could be made for a small fee. The college authorities had considered the matter, and had come to the conclusion that they would not be justified in carrying out the suggestions unless other County Councils wished to have the same facilities, because a new laboratory would be necessary, and the Councils would have to pay for the cost of establishing it, and also vote an annual fixed sum to keep the chemist, because the fees suggested would not be sufficient to support him. Mr. Vaughan Davies said it was a big undertaking, and he strongly recommended them not to come to a definite conclusion that day. Mr. Peter Jones said it was a matter of considerable importance to the agriculturists of the county, and they certainly ought to have much more information than they then had. In order to get this information he proposed that the matter be relegated to the Technical Instruction Committee, who could report to the next meeting. Mr. Vaughan Davies seconded, and it was carried.

INSPECTORS' REPORTS.

WANDSWORTH AND THE FOOD AND DRUGS' ACTS.

The Inspector under these Acts reported as follows:—"That four samples of milk and two samples of butter, purchased in the parishes of Clapham, Putney, Streatham, and Wandsworth, have been analysed, and that such samples are reported to be genuine."

ARBROATH.

Mr. McNeill, Sanitary Inspector, has received the report by Mr. Macdougald, Public Analyst for the burgh, on the 12 samples of milk forwarded to him for analysis in the beginning of the week. One sample is reported low in fat and skimmed; six low in fat; and one slightly low in fat. One sample is reported high-class; while three samples are passed without comment.

At the meeting of the Glosop Sanitary Committee, Mr. S. Dane, the Sanitary Inspector, reported that in consequence of a complaint received, he went over to Hadfield last week and seized a quantity of tripe which was exposed for sale. He submitted it to Dr. Rhodes, the Medical Officer of Health, who condemned it as unfit for human food. Councillor F. Rigge said he had authority to say that the tripe seized had only been boiled 17 hours when taken from Hadfield. Mr. Dane said it was seized between nine and ten o'clock at night, and condemned by the Medical Officer about 11 o'clock. Councillor Barnes said he did not advocate proceedings being taken, but he hoped it would be a warning to him. They had a case in High-street West, where, in his opinion, the man's illness could be traced to the food he ate. His real sickness only lasted about 13 hours, and it behoved anyone dealing with that material to be very careful. Councillor Rigge said if they took proceedings they would get no conviction against the man. Councillor Bennett said it was a question whether the man—who was amongst it and handling it—would know that it was bad. A stranger to the place would soon detect it. Dr. Rhodes remarked that anyone selling shell fish, tripe, or anything of that kind, if they had any complaint made to them by a purchaser, should make a careful inspection of the stock on hand. He did not refer to this particular case, but it gave him an opportunity of speaking with regard to other cases that have occurred on the Market ground. Councillor Rigge said he could state that the tripe referred to was good at eight o'clock. Mr. Dane said the tripe he seized could not possibly have been good at that hour. There were two bellies, one of which he believed had contaminated the other. There was no motion and the subject dropped.

IF YOU SELL A GENUINE ARTICLE

LET THE PUBLIC AND THE TRADE KNOW IT.
ADVERTISE IT IN "FOOD AND SANITATION."

Retail Traders study FOOD AND SANITATION to know what Food Stuff they can sell without risk of prosecution.

The Grocer who does not subscribe to FOOD AND SANITATION, places himself at the mercy of unscrupulous wholesale dealers. FOOD AND SANITATION costs only 6s. 6d. yearly, post free, and has saved its readers from many prosecutions. Send on your 6s. 6d. at once, and begin with the New Volume.

Subscribers should address, PUBLISHER,
"FOOD AND SANITATION," 183, Strand, London, W.C.

A STIPENDIARY ON SOMERSET HOUSE ANALYSES.

Before the Potteries Stipendiary (Mr. H. Wright), at Hanley, on September 18th, Mr. Ashmall mentioned a case in which a milk-seller was charged by the Sanitary Committee of the Town Council with an offence under the Food and Drugs Act. He said that the case would not come on for hearing until the 2nd prox., and on behalf of the defendant he asked his Worship to order that the third sample of the milk in the possession of the prosecutors should be submitted to the authorities at Somerset House for independent analysis. The Stipendiary said the defendant had a sample of the milk, which he might have analysed. Mr. Ashmall: He has done so. The Stipendiary said that in that case he must give notice to the prosecution that he intended to challenge the certificate of the Public Analyst, and then, after hearing both sides, the Court might, for its own guidance, order the third sample to be independently analysed. But he might say, so far as the matter was left to his discretion, he should not send anything to Somerset House. Generally speaking, their certificates either misled the Court or contained information which was of no assistance to the Court. In fact, there was always a dispute as to the meaning of the certificate, which, in his opinion, was of no assistance to anybody. Therefore, as far as he was concerned, he should not trouble the Somerset House authorities, but rely upon the evidence of the Analysts called as witnesses. Mr. Ashmall said that an independent analysis of the third sample would probably benefit the defendant. The Stipendiary replied that the third sample was for the benefit of the Court, and he could not at that stage make the order applied for.

MARKET REPORTS.

SUGAR.—Refined generally quiet but steady. Pieces sold at previous rates. Yellow crystals in fair demand at full prices. White crystals firm. Stoved good unchanged in value, with a moderate inquiry. Foreign refined quiet. Cane sorts unchanged. Tate's cubes, firsts, 23s; seconds, —; crushed, firsts, 20s 6d; seconds, 20s; Liverpool crystals (September delivery), firsts, 22s 6d; small, 22s 8d; seconds, 22s; granulated, 21s; Martineau's pulverised, 20s 9d; granulated, 20s 9d per cwt. Beet quiet but firm. The moderate sales of beet include October 14s 1½d less ¼ per cent., 14s 3d less ¼ per cent., and 14s 3d less ¼ per cent.; November-December, 14s and 14s plus ½ per cent. buyers of ready sugar, and September delivery at 15s.

TEA.—The auction supply of Ceylon was 17,740 packages, which met a steady demand at quiet previous rates for good liquoring qualities. 3,783 packages China went without alteration for either congous or scented teas. Terminal easier for September, but all other months firmer for both China and Indian.

COFFEE.—The market is quiet but good. Home trade coffees are steady in value. The auctions were small, and did not affect quotations. Futures dull and easier, closing weak. New York opened 50 to 75 points down. Havre afternoon report: September, 99f.

December, 96½f.; March, 94f.; May, 93f.; Hamburg, September, 80½m; December, 77½m; March, 75m; May, 74m; Amsterdam, 51½s.

SPICES.—In the public auctions the demand was dull, and of the moderate supplies offered only a small part sold. Prices were generally unaltered.

ARROWROOT.—Of 277 barrels St. Vincent's the bulk was bought in at 2½d to 3d, a few lots selling at 3½d per lb.

SAGO.—Quiet; 196 bags small grain bought in 11s 6d, and 76 bags flour at 9s 6d per cwt.

TAPIOCA.—Slow sale. Of 3,049 bags flake barley 500 bags sold; Singapore, 1½d to 1¾d; Penang, 1½d; 30 barrels Rio bought in, 6½d per lb.; 430 bags seed pearl bought in, 13s to 13s 6d; 599 bags medium, 150 bags sold 11s 6d to 14s; and of 36 bags flour 20 bags sold 5s. per cwt.

RICE.—In public sale 453 bags Japan cleaned bought in 9s 9d. 130 bags Java cleaned sold 8s 6d per cwt. The private contract market has been quiet for soft grain cargoes.

CHESHIRE CHEESE.—There were about 50 to 60 tons of cheese on offer. The market showed a great improvement, there being a greatly increased demand at slightly advanced prices. Quotations:—Common, 38s to 46s; medium, 45s to 55s; and good Cheshire, 56s to 62s per cwt.

CORK BUTTER.—Ordinary: Firsts, 105s; seconds, 99s; thirds, 95s; fourths, 74s. Kegs:—Mild-cured firkins: Superfine, 115s; fine 109s; mild, 100s. Kegs: Mild, 99s.

THE BRITISH INSTITUTE OF
PUBLIC HEALTH.

The Examiners appointed by the Institute will hold an Examination for the Certificate of competency as a Sanitary Inspector on Friday and Saturday, the 27th and 28th October. Candidates intending to present themselves for examination must give notice thereof in writing on forms to be obtained on application to the Secretary, 20, Hanover Square, London, W., not later than the 19th October.

Every Candidate who passes the Technical Examination to the satisfaction of the Examiners will receive a Certificate testifying to his knowledge of what is required for the duties of a Sanitary Inspector.

C. A. JAMES, Secretary.

September 14th, 1893.
20, Hanover Square,
London, W.

SIDNEY ORD & CO.'S
HIGH - CLASS JAMS.

ABSOLUTELY PURE AND FREE FROM ARTIFICIAL COLOURING.

1, SOUTHWARK PARK ROAD, LONDON, S.E

THE MOST POWERFUL DISINFECTANTS OF THE PRESENT DAY ARE

HIGHLY CONCENTRATED AND
SPECIALLY PREPARED FOR

Hospitals, Surgeries,
Asylums,
Local Boards,
Workhouses, Schools.



In 1, 5, or 10 Gallon
Iron Drums
(for Large Public In-
stitutions).

Larger Quantities specially
quoted for.

Write for Samples
and Prices to

Whalley's Sanitary Fluid Co., 56 & 57, Aldermanbury, London, E.C.

Food & Sanitation

The Anti-Adulteration Journal.

Vol. III. No 60.

LONDON: SATURDAY, SEPTEMBER 30, 1898.

Subs. 6s. 6d. per Ann., Post Free
PRICE ONE PENNY.

Crosse & Blackwell's PURE MALT VINEGAR,

In Imperial pint and quart bottles,

IS SOLD BY ALL GROCERS AND ITALIAN WAREHOUSEMEN.

CROSSE & BLACKWELL, LIMITED, SOHO SQUARE, LONDON.

CADBURY'S

"The name CADBURY on any packet of Cocoa is a guarantee of purity."
—Medical Annual.

"The typical Cocoa of English Manufacture, absolutely pure."—*The Analyst*.

NO CHEMICALS USED

(As in many of the so-called Pure Foreign Cocos).

Champion's VINEGAR.

Absolutely PURE.



USE
MILKMAID
CONDENSED
MILK

HIGHEST AWARDS
WHEREVER
EXHIBITED.



TRADE MARK.

The BRITISH MEDICAL JOURNAL (Jan. 21, 1893) says:—

It is of great importance to be able to rely on obtaining condensed milk containing its proper amount of fat, and not made with unwholesome sugars. We are able to recommend the Anglo-Swiss Company's Milkmaid brands as being what they are represented to be, and as thoroughly reliable.

ANGLO-SWISS CONDENSED MILK CO., 10, MARK LANE, LONDON, E.O.

BOVRIL

CONTAINS in an EASILY DIGESTIBLE
FORM the ALBUMEN and FIBRIN, the
NUTRITIOUS CONSTITUENTS of PRIME
OX BEEF.

Bovril Ltd., Food Specialists, London. Directors { Rt. Hon. LD. PLAYFAIR, K.C.B., LL.D.
ROBT. FARQUHARSON, M.D., M.P.,
&c., &c.

A NEW SANITARY JOURNAL.

SANITARIANS everywhere know the want of a real Sanitary newspaper, that will not content itself with dry-as-dust reports that are as objectless as they are non-educational. On October 14th there will be published, at 183, Strand, London, W.C., a journal which will fight for Sanitary advancement as strenuously as FOOD AND SANITATION has fought against adulteration. The new journal is THE SANITARY ENGINEER. It will be a real, live newspaper, unconnected with any association or clique, and will rest its claims for support upon its absolute independence and public usefulness. It will be no respecter of shams, and no burker of facts. Wherever the earnest Sanitary Officer is found fighting against slum property-owning local board members, town councillors, etc., THE SANITARY ENGINEER will endeavour to strengthen his hands. Wherever corruption and selfishness suppress dangers menacing public health and tie Sanitary workers in red tape, THE SANITARY ENGINEER will range itself on the side of progress. Its policy will be "Not Men but Measures;" its motto, "Advance Sanitation." It will be a complete Sanitary journal, dealing thoroughly with Engineering, Sewage Utilization, Sewerage, Drainage, Lighting, Plumbing, Heating, Ventilation, Water Supply, Disinfecting and Disinfectants, &c., and will be published at a price bringing it within the reach of all interested in Sanitation. Medical Officers and Sanitary Inspectors subscribing to FOOD AND SANITATION, will find the SANITARY ENGINEER well worth ordering. Readers of FOOD AND SANITATION will greatly oblige by bringing the new journal before the notice of friends interested in Sanitary matters.

SUBSCRIPTION FORM.

To the Publisher of the SANITARY ENGINEER,

183, Strand, W.C.

Enclosed 6s. 6d. for one year's subscription, post free.

Name _____

Address _____

Date _____

FACTS FOR SOAP MAKERS.

The race is not always to the strongest nor to the swift. It is to the man who seizes his opportunities. In the race for wealth the humbug who knew how to make water stand upright and sell it as soap, had not behind him the strength of an honest article, but he had the brains to see that mankind were as well fitted for flying as for thinking, and the swiftness to seize the press and proclaim to the public that the complexions of this professional beauty and that world-renowned vocalist came from his soap—though they didn't. Result—a colossal fortune. There are genuine, unadulterated soaps in England, that are being sold honestly to the public for what they are, and whose makers scorn to avail themselves of such swindles as the 12oz. bar bought by gullible purchasers under the belief that it is a pound of soap. But the mass of the public know nothing of these honest articles, because their makers rarely advertise them, and if they do attempt advertising they do so in the most foolish fashion. They try advertising as the Indian tried feathers. He took one feather, laid it on a board and slept on it all night. In the morning he grunted out, "White man say feathers heap soft; white man heap fool—humph." One proposal for abolishing soap swindles has been made by a Blackburn grocer, who says:—

"My suggestion is—taking soap as an instance—that we have what might be called an association soap, that is, each association adopt, and if necessary register, a name or design. A sub-committee might then be appointed to meet some reliable soap manufacturer to arrange prices and terms of the soap or soaps required. As this system of trade would abolish the traveller, doubtless the manufacturer would allow the association a fair commission in lieu of the traveller's salary, which might be used for advertising purposes. By way of protecting the association from responsibility in respect to members' accounts, the association should simply act as the manufacturer's representative, all accounts being sent by the member direct to the firm.

"All orders should be sent to the secretary, who in turn would forward them to the maker. By this means wholesale grocers might be allowed to stock the soap in order to supply those purchasing less than 5 cwt. at a time. The commission on these orders would thus help to swell the advertising fund. It seems to me that this plan, or else that of each individual grocer adopting the 'own-name-and-label system,' is the only one for ameliorating the grocers' position."

NOTICE TO SUBSCRIBERS.

Index to Volumes I. and II. is now ready, price 1s. Volumes I. and II., bound in cloth, gold lettered, with index complete, 7s. 6d. each, carriage paid. Postal Orders to be made payable to the Publisher, FOOD AND SANITATION, 183, Strand.

IF YOU SELL A GENUINE ARTICLE

LET THE PUBLIC AND THE TRADE KNOW IT. ADVERTISE IT IN "FOOD AND SANITATION."

Retail Traders study FOOD AND SANITATION to know what Food Stuffs they can sell without risk of prosecution.

The Grocer who does not subscribe to FOOD AND SANITATION, places himself at the mercy of unscrupulous wholesale dealers. FOOD AND SANITATION costs only 6s. 6d. yearly, post free, and has saved its readers from many prosecutions. Send on your 6s. 6d. at once, and begin with the New Volume.

Subscribers should address, PUBLISHER,

"FOOD AND SANITATION," 183, Strand, London, W.C.

"FOOD AND SANITATION" has over 20,000 Readers: Medical Practitioners, Sanitary Inspectors, Food and Drugs Acts Inspectors, Wholesale and Retail Grocers, Weights and Measures Inspectors, Town Clerks, Solicitors concerned with the Food and Drugs and Public Health Acts, Surveyors, Medical Officers of Health, and the General Public.

To the PUBLISHER,

"FOOD AND SANITATION,"

183, Strand, W.C.

Please forward me a copy of "FOOD AND SANITATION," weekly, for twelve months, for which I enclose Six Shillings and Sixpence.

Name _____

Address _____

Date _____

Here is an opportunity for a maker of genuine soap to at once benefit himself, grocers, and the public. Makers of really good soaps may themselves know why they have left the market so long to be exploited by the 12 oz. bar and free distribution by van gentry, but it has long been a puzzle to grocers that so very few genuine soaps have been advertised into public favour and so much rubbish has been thrust before the public.

A NEW GUNPOWDER.

The Abbé Schnebelin is a brave man. None but a sanguine and plucky inventor would, in the face of the cordite exposures, venture to give experiments with a new powder in the hope that our War Office may be induced to save about 8d. in the shilling by adopting it; but the Abbé seems to have faith in his invention, and in the possibility of Government scientists refraining from bludgeoning him and patenting his brains. On the 21st, at Nunhead, he gave a series of experiments to prove the following advantages of Schnebelite over all other known explosives:—

1. Simplicity of manufacture. No special apparatus being necessary. The Abbé made some powder upon the field, and it was ready for firing shortly afterwards.

2. It produces very little smoke, and that the recoil was slight was tested by firing the regulation rifle and other fire-arms.

3. It is adapted for all war purposes, for mining dislodgements, and its advantages were demonstrated by exhibitions with the regulation, the sporting rifle and shot gun.

4. It is imperishable, and retains its virtue after being made wet and exposed to intense heat.

5. The powder in no way oxydizes the gun, the air is not contaminated, and it generates pure oxygen.

6. The powder can be produced for 4d. per lb.

7. It is non-explosive when exposed to the atmosphere, and the Abbé demonstrated that the severest concussion or friction had no effect upon it. It requires 540 degrees Fahrenheit to produce combustion, when it burns harmlessly. Its force of penetration is superior to any known powder.

The experiments certainly showed it to be a good powder, but they were not of a sufficiently scientific character to conclusively prove its superiority in penetrative force, absence of heating and minimum of recoil over other well-known but dearer powder.

THE BRITISH INSTITUTE OF PUBLIC HEALTH.

The Examiners appointed by the Institute will hold an Examination for the Certificate of competency as a Sanitary Inspector on Friday and Saturday, the 27th and 28th October. Candidates intending to present themselves for examination must give notice thereof in writing on forms to be obtained on application to the Secretary, 20, Hanover Square, London, W., not later than the 19th October.

Every Candidate who passes the Technical Examination to the satisfaction of the Examiners will receive a Certificate testifying to his knowledge of what is required for the duties of a Sanitary Inspector.

C. A. JAMES, Secretary.

September 14th, 1893.

20, Hanover Square,
London, W.

CALVERT'S CARBOLIC OINTMENT,

Large Pots, 13d. each, with full Instructions.

Court Circular says: "We cannot too highly recommend Calvert's Ointment. It is the best general Ointment with which we are familiar, and ought to be a stock remedy in every household."

Private report from Limassol Cyprus: "I have never found anything to come up to it for neuralgic 'Rheumatic Pains.'"

Samples sent Free by Post on receipt of value.

F. C. CALVERT & CO., MANCHESTER.
Awarded 60 Gold and Silver Medals and Diplomas.

FOOD & SANITATION.

THE QUEER MILK CASE.

It will be seen by the following case that the very peculiar experiences of Mr. F. J. Lloyd, have been accepted as conclusive against absolute figures brought by a Public Analyst, proving a deficiency of 20 per cent. of fat.

At Marylebone, on September 19th, Henry Loveridge, an employee of the West London Dairy Company, 31, High-road, Kilburn, appeared to an adjourned summons for selling milk deprived of 20 per cent. of fat, on the 27th July. When first before the Court the case was adjourned to allow of the hearing of a summons against the consignee of the milk, who resides in the country. That was heard and determined on Saturday week last, when it was held that the hot and dry season materially affected the composition of the milk. Mr. Plowden was remarking that the summons against Loveridge must, as a matter of course, after his recent decision, fall through, when Inspector Watts, of the Middlesex County Council, asked that the Analyst himself might be heard as a witness, as this was different milk and a different case altogether. Mr. Ricketts, solicitor, who defended, objected to the application, but after some discussion, Mr. Edward Bevan, Analyst for the Middlesex County Council, was examined as a witness. He explained that this was not a case of added water, but that the fat had been abstracted. There was no evidence of added water in the sample of the defendant's milk, but there was 20 per cent. less of fat. Cross-examined: He made allowances as to water according to the season, but his experience had been that the heat or dryness of the weather did not affect the amount of fat in milk. Mr. Plowden: What is the fat? Isn't it the richness of the milk? Witness: It is the cream. Mr. Plowden: The better the milk the more the cream? Witness: Speaking generally, yes. Mr. Plowden: If it is a bad season would it not affect the cream? Witness: I can only give you my experience. This 20 per cent. deficiency is below the lowest average. Mr. Plowden said he hoped he had come to the last of this group of melancholy milk cases. It had been proved that the milk came from a farmer named Norman, who was before the Court last week, and that the pooriness of the milk was due, not to fraud, but to the abnormally hot weather. Speaking with some diffidence, he could not agree with the opinion given by the specialist, Mr. Bevan, that the richness of the milk was not affected by the weather. It seemed to him that where the grass was poor it affected, not only the water and the solids, but also the cream. In dismissing the summons he expressed the hope that the season next year would return to its normal condition.

We have little hope that milk will return to its normal condition so long as gullible magistrates like Mr. Plowden sit upon the Bench. The case of Norman's milk, reported in *FOOD AND SANITATION*, p. 277, was decided after a fashion that would have been absurd had it taken place at a mock trial in a tap-room. The defendant gave evidence, one of his witnesses gave evidence, and Mr. Frederick J. Lloyd, chemist, gave evidence, each in the interest of the defendant. Upon the evidence of Mr. Frederick J. Lloyd that he saw 17 cows milked in the middle of a field, and that on analysis the milk showed 8 per cent. of water, Mr. Plowden dismissed the case. There was no independent evidence to show that the test was a real one. It was not apparently made in the presence of the Analyst whose analysis was dis-

puted, or of persons representing the prosecuting Vestry. Mr. Lloyd's analysis may have been accurate or it may not have been—there was no examination of his figures or of the methods by which he arrived at his strange results. We have no intention of aspersing Mr. Lloyd's *bona fides*, but it is the height of absurdity to accept Mr. Lloyd's experiments as conclusive without independent verification. It should be borne in mind that Mr. F. J. Lloyd is the Analyst to the Metropolitan Dairymen's Society, of which Mr. W. T. Ricketts, who defended, is solicitor. No magistrate who knew his business would, in the face of these facts, accept such evidence as conclusive without evidence of an absolutely independent character to prove that the churn into which the milk of the 17 cows was placed contained no water, that the milking vessels also contained no water, and that Mr. Lloyd's figures and analytical methods were incontrovertible, and that the milking of the 17 cows was properly performed. For our part we feel it necessary in the public interest to protest against Magistrates taking so stupid a view of their duty to the public, and against hole and corner analyses being accepted without question against those of the Public Analysts. Mr. Plowden's folly in this case will not be heard the last of for a long time. It is already being availed of by milk adulterators everywhere throughout the country.

VINEGAR.

THE value of a recommendation in *THE GROCER*.

The Grocer, Sept. 16th, said:—

"It is difficult to understand why many in the trade risk a prosecution when there are vinegar brewers ready to guarantee their manufacture. Messrs. Hill and Underwood's advertisement will be found on our front cover, and ——— on the back; a page advertisement of the ——— will be noted in the centre of the paper; whilst on page 6 there is one by ——— of ———— all these firms guaranteeing the purity of their vinegar."

Police Court report:—

"At West Hartlepool, Henry Boddy, of Poplar-road, was charged by Mr. Wheat, Inspector under the Food and Drugs Act, with selling adulterated vinegar. Defendant admitted the fact—The Analyst's report stated that the sample showed only 2.80 per cent. of acetic acid against a minimum of 3 per cent., showing a presence of 7 per cent. of extraneous water.—The defendant said he obtained the vinegar from Messrs. Hills & Underwood as pure malt vinegar. He had recently written them, and they guaranteed it to be pure vinegar. If they fined him he would bring an action against them in the County Court.—The defendant was fined 20s. and 17s. 6d."

We have out of sympathy with the other victims of this puff refrained from publishing their names; but this instance is eloquence itself as to the regard retailers should pay to advice given by *The Grocer*. Grocers and advertisers can draw their own conclusions as to the value of a *Grocer* puff.

TEN SHILLINGS FINE FOR NINETEEN PER CENT. OF WHEAT FLOUR AND TURMERIC SOLD AS MUSTARD.

At Spalding Petty Sessions, T. G. Hardy, grocer, of the Market-place, Spalding, was summoned for selling $\frac{1}{2}$ lb. of adulterated mustard on August 2nd. Inspector Rodgers said that he visited the shop, purchased a $\frac{1}{2}$ lb. mustard, being served by the defendant. The parcel was handed over to the Superintendent, and had been analysed by Mr. C. H. Southwell, of Boston, County Analyst, who had reported that the mustard contained foreign matter, viz., not less than 19 per cent. of wheat flour with a portion of turmeric. Defendant admitted that the mustard was adulterated, but he had sold it as he received it from the manufacturers, believing it to be a pure article. Some of the mustard prepared by manufacturers was mixed by them with ingredients to improve the taste of the article. Superintendent Jarvis stated that he had seen the statement of Messrs. Colman and Co. to the effect that they did send out three sorts of mustard, but each was properly labelled. The mustard Mr. Hardy sold was not labelled. Fined 10s., and 8s. 6d. costs.

THE MIGHTY MR. SLADE STOOPS TO COMMON SENSE.

At Southwark, on September 18th, Mr. J. A. Anson, one of the Sanitary Inspectors of St. George-the-Martyr, Southwark, applied for a Magisterial order under the Public Health Act for the destruction of a quantity of Ostend rabbits seized by him on Saturday evening, as being unfit for human food. Mr. Slade asked where the rabbits were. The Inspector said they were in the Vestry green-yard. They were in such a bad state that it was impossible to bring them to the Court. The stench from them was so horrible that he had smothered them with carbolic acid. Mr. Nairn (Chief Clerk): They are not on private premises. Inspector: No, sir. Mr. Slade: Very well. In that case I will go and see them. On returning to the Court Mr. Slade made the required order.

THE SOMERSET HOUSE MILK STANDARD.

The *Cowkeeper and Dairyman's Journal* for September, says:—We understand that the results obtained by the Somerset House authorities in analysing samples of milk taken in various parts of the country under circumstances of a varied and interesting nature are not at present ready for publication, but will be issued shortly in the report of the Local Government Board. We believe that it is an open secret that the standard will be considerably increased in point of fat, and that three per cent. will be in the future considered the minimum that should be found in pure whole milk.

BUTCHERS AND INSPECTORS.

Look on this Picture.

At the Butchers' National Federation Meeting, Mr. Ramsden said: "he had had over forty years' experience as a butcher, and for the first thirty years it was never advanced to him that the flesh of an animal suffering from tuberculosis in a very slight degree was at all dangerous, and that it was transmissible to the human kind. They had had the evidence of the most eminent pathologists, and that went to show that there had never been a case where it could be proved that the disease was transmissible. Yet they were suffering from such judgements as that of Mr. Wagstaffe, of Birkenhead, a man who set himself up to be a greater authority than Professor Dreschfield. In consequence of the pertinacity of that man they had been called upon to pledge themselves to the extent of £100 each in order to take a case to London. Was it possible any body of traders was going to stand this any longer?" (Applause.)

Mr. Wharton, Alderman and J.P., offered his sympathy to Birkenhead. They had Wagstaffe at Bolton, and they were glad to get rid of him.

It would be interesting to know if this peculiar Nupkins adorned the bench on the occasion above referred to. We can thoroughly understand the Bolton Shallows and Slenders anxiety to get rid of any efficient official, seeing that by the Local Government Board's report for a populace of 115,000, only 51 samples of food, drugs, and drink were taken for analysis instead of the 115 that at the lowest computation ought to be taken. It would seem that the milk rogue, the margarine as butter thief, the beef-steained lard swindler, and the "best the world produces" American as Irish bacon charlatan must be having almost as uncommonly a fine time of it in Bolton as the "slink meat" vendor is having.

THE GOOD CHURCHWARDEN AND THE WICKED INSPECTOR.

At the Brownhills Police-court, on the 13th inst., before A. E. Manley, G. Brown, and G. R. Dyott, Esqrs., Samuel Meacham, Wimblesbury-road, Hednesford, was charged with an offence against the Food and Drugs Act at Chasetown Market on the 29th of July last. Defendant pleaded not guilty. Mr. Samuel Toy, for the prosecution, stated that, in company with Inspector Morris, he visited Chasetown Market on the day mentioned. He saw a boy run from the entrance of the market into the defendant's stall and begin to speak rapidly to his father. The boy immediately turned round and took out a properly marked ticket and placed it on the butter on the stall. Mr. Morris then asked for half-a-pound of this butter, pointing to the margarine. Defendant said that it was not butter, but margarine. He paid at the rate of 1s. per lb. for it. He had had it analysed in the usual way, and the Analyst stated that it contained only 7 per cent. of real butter. He had often bought the same kind at 6d. and 8d. a pound. Defendant, in defence, said the butter had not been turned out 15 seconds, and at the time his son turned it out he was busy serving his customers. Mary Ann Gettings, Triangle-terrace, for the defence, said she saw Mr. Toy rush up and grasp the boy by the arm. The boy had only just turned the butter out and was placing the label on it when the gentleman caught hold of him. She had dealt with S. Meacham for eight years. Cross-examined by Mr. Morris: She always received her butter wrapped up in a margarine paper. They knew it was not butter. They could not expect to get real butter at that price. Geo. Wood corroborated the last witness's statement. The Rev. Wm. Collett, curate at Hednesford, asked if there was any part he could take in the proceedings other than speaking to the character of the defendant. He was told there was not. The rev. gentleman then went on to say he had known S. Meacham for three years. He had known him intimately, and had always found him strictly honest and always very desirous to do what was right. Defendant was churchwarden at the church he was connected with, and asked him to speak for him in this case, and he could testify to the integrity of his character. He had many opportunities of forming an opinion on his affairs. He had seen the margarine marked in defendant's shop at Hednesford. By Mr. Morris: It was possible that by an act of carelessness or by an accident that the label might have been omitted. Mr. Morris contended that the defendant should have corrected his customers when they called the margarine butter. He was not wishful to press the case. The Bench said they considered the offence was proved, and as the defendant bore such a good character, and it was his first offence, they would only inflict a fine of 20s. The costs were 22s.

And on That.

Dagonet in the *Referee*, September 28th, 1890. "There is hardly a day passes without some scoundrel being detected in attempting to foist stuff unfit for human food upon his fellow-creatures. And when the case is fully proved, the offender is let off with a paltry fine utterly insufficient to deter him from pursuing his evil, but highly profitable, occupation of poisoning the public."

"Let me cite a case which catches my eye even as I write. In a Liverpool paper of last Thursday I find the following:—At the Bolton Police-court a local butcher is summoned for attempting to sell 60 pounds of diseased beef to his customers. The lungs [of the beast were described as in a most advanced stage of tuberculosis, but the carcase had been dressed so as to disguise all trace of the disease. The butcher was fined twenty shillings. Such a penalty for such an offence is an absurdity. But it is a fair specimen of the way similar cases are treated all over the country."

TRYING TO REACH THE SWINDLING BREWER.

Flintshire County Council at its last meeting considered the following resolution which had been referred by the Council to the General Purposes Committee, and which had been passed by the Bedfordshire County Council. The general purposes Committee recommended its adoption:—"That, in the opinion of this Council, it is desirable that all vendors of beer which contains ingredients used in substitution for malt and hops should be required by law to supply to each purchaser, at the time of delivery, a notice by a label, distinctly and legibly written or printed, with the beer purchased, to the effect that the same is a mixture, and that a copy of this resolution be sent to the President of the Local Government Board, and to the other County Councils." Mr. H. Goodman Roberts moved, as an amendment, "That all wholesale vendors of beer which contains ingredients used in substitution for malt or hops should be required to supply to every retail vendor thereof a sufficient supply of notices, printed in large and conspicuous type, to the effect that the beer sold by such retailer is a mixture, and each retailer should be required by law to place one of such notices in a conspicuous position in every bar, room, or other place wherein such beer is retailed." Alderman Hall said there was a vast amount of vile ale and porter hawked about and sold, and it was only right the public should know what it contained. The amendment was carried.

We are glad to see this resolve of the Flintshire County Council, and hope other authorities will follow the good example. Year by year beer has become lighter, and consequently cheaper to the brewer, but the Inland Revenue's folly allows the brewer to use any trash he pleases and call his chemical concoction beer. The public has been swindled, and the publican has been charged beer price for chemical swipes, and to whose advantage? Solely to swell the swindling brewer's enormous profits. Considering the demand for light beers that has grown in recent years, the least the favoured brewer might have been expected to do would have been to brew honest beer, but he has preferred to avail himself of chemistry—quassia, chiretta, sugar, and glucose, etc., and be an enemy to English agriculture. He knows that a purchaser who asks for a glass of beer expects the product of malt and hops, but he supplies his customers instead of a genuine honest article with swipes under the shelter of the Inland Revenue blindness and ignorance. It is a grave scandal that the folly was ever committed, but it will be worse than a scandal; it will be hurrying English barley-growing and hop-growing out of existence, if there be not prompt legislation to enable an Englishman to get a glass of pure beer in his own land, and to stop this imposture upon the public of brewing a beverage from any kind of trashy substitutes, chemically dosing it with preservatives, adding salt and what not to it, and libelling our national beverage by selling such swipes as English beer.

GROCCERS SHOULD KNOW THE LAW.

At Dudley, on September 15th, Thomas Chilton, who, being ill, was represented by his wife, was charged under the Food and Drugs Act with selling as butter a substance not of the nature and quality of the article demanded. Mr. E. M. Warmington (Town Clerk) prosecuted, and said the defendant was a grocer in a very small way at Woodside. He and his wife were in very poor circumstances, and he attributed to their ignorance more than anything else the fact that they sold as butter an article which, upon analysis, was found to contain 90 per cent. of foreign fats. He could not proceed against the wholesale dealer, inasmuch as it had been sold to defendant as "margarine," and, under other circumstances, the case would have been a very bad one; but they all new the dense ignorance that prevailed amongst the poor in places like Woodside. Mr. Charles Pargeter, Sanitary Inspector, proved the purchase of the article at 10d. per lb., and produced the certificate of analysis. Margarine was sold at prices varying from 6d. to 1s. 4d. per lb., being dearer than some butter. Defendant's wife said she did say it was butter. The Magistrate's Clerk: But that was what you were asked for. Mrs. Chilton: I only sell mixed butter. It was pointed out that the article ought to have been labelled "Margarine," and only sold as such. The Bench hoped the prosecution would act as a warning to others, and fined defendant 10s. and costs.

SOMERSET HOUSE AND DECOMPOSED MILK.

A year ago such an admission as the following, would have been unhelped for. To-day, thanks to our exposures, the department is slowly but surely covering itself in "sackcloth and ashes." Were it not that a stern public duty demands the eradication of the department, root and branch—so far as food analysis is concerned—we would feel half inclined to pity the poor department after the "*ad misericordiam*"—climb down:—

Inland Revenue.

The Laboratory,
Somerset House, W.C.

22nd August, 1893.

Sir,—The sample of milk marked C.M. 49, sent by you yesterday, owing doubtless partly to the unusually hot weather, and partly to the bottle being insufficiently filled, is not in a condition for a satisfactory analysis to be made.

Under these circumstances we shall be unable to furnish a certificate.—I am, Sir, your obedient servant,

The Clerk to the Magistrates,
Marylebone.

J. BELL,
Principal.

SOOTHING NOSTRUMS CAUSE DEATH.

The scandal of selling poisonous powders called "infants' preservatives," afforded another object lesson in child murder at Manchester, on September 25th:—

The deputy city coroner, Mr. S. Smelt, held an inquiry respecting the death of the infant son of Charles Joseph Baines, plumber, Garnett-street, Cheetham. The child died from the effects of an overdose of "infants' preservative," which had been purchased at a grocer's shop and administered by the mother. The grocer admitted that when he sold half an ounce of the preservative to Mrs. Baines he put no label on the bottle, but there was a large label on the bottle supplied to him by the wholesale chemist. Witness had no knowledge of the contents of the "preservative," and he was not a chemist. The jury returned a verdict of accidental death, and censured the mother of the deceased for her carelessness in giving the child the medicine. They also recommended that the attention of the Home Secretary should be called to the danger attending the sale of infants' preservatives, containing narcotics, by unqualified persons.

What we marvel at is the recommendation of the jury. A rubbishy, soothing powder or preservative is just as rubbishy and as dangerous when sold by a qualified chemist, as by an unqualified person. The scandal is that our Government for the sake of £200,000 per year, allows patent trash of any kind—poisonous or otherwise—to be sold with impunity by chemists and others, and that the public are swindled, and child murder assisted by Government sanction. Any but a jury of block-heads would have seen this. When will some jury recommend a guinea per bottle or box tax on quack nostrums? That is the way to crush the swindle, and prevent the manufacture of little angels by this or that so-called "soothing syrup," or "preservative."

THE BENEFIT OF BEING A TOWN COUNCILLOR.

At Harwich Guildhall, on September 19th, Mr. Robert Hill, grocer, of Harwich, and a member of the Town Council, was charged under the Food and Drugs Act, with having sold coffee adulterated with chicory. Mr. W. Marshall, of Ipswich, defended. Inspector Fulcher stated that on the 17th August last he visited the defendant's shop in King's Head-street, and was supplied with 8 oz. of coffee by the defendant, and paid him 8d. for it. Witness then informed him that he was going to have it analysed, and defendant said, "I did not sell you that as coffee, but as a mixture." Witness replied that he bought it for coffee, and paid the price he asked. The certificate received from Mr. Pooley, Public Analyst, stated that the coffee was adulterated with 45 per cent. of chicory. In cross-examination witness stated that he was quite sure the defendant never said that it was a mixture or pointed to the label on the tin, on which it was printed that it was a mixture. Witness went personally to London to see the Public Analyst. Police-constable James said he accompanied the last witness, and corroborated what he had said. Inspector Fulcher said that in many such cases the label protected the vendor. Mr. Marshall contended that the defendant did not sell the mixture as pure coffee, a statement which, he said, could be proved by his wife and daughter, who were present. Inspector Fulcher denied that these two ladies were in the shop when the tin was opened. The case was dismissed, with costs for Mr. Hill, 1½ guineas, and Magisterial costs, 10s. 6d., total £2 2s. against the Inspector, which will teach the Inspector that he may sue common grocers, but that he must not venture between the wind and a Town Councillor's coffee and chicory.

THE SALT COATS POLICE COMMISSIONERS AND THE FOOD AND DRUGS ACTS.

At the last meeting the adoption of the above Act was thrown out in suggestion, and the advisability of appointing a Public Analyst discussed. Bailie Miller: It was brought up years ago, but was continued for further information. An important point is where the expense is to come from. The Clerk read a portion of the Act, which showed that the expense came out of the burgh rates. The Provost (to Dr. Brown): You have been doing a little in that line, haven't you? Dr. Brown: Yes, but nothing like what a proper Analyst would do. In Androssan they have an Analyst for testing milk, etc. The Clerk: I think Androssan had that at a time when burghs had no power to do so. The matter was left over.

Truly Scotch towns afford some curious cases of fatheaded maladministration, but what have the plundered public to say to it?

GERMAN SAUSAGE REVELATIONS.

At the Newcastle Health Committee's meeting, Mr. Coltman said that in the Medical Officer's last report it was stated that a slaughter house had been licensed at St. Lawrence for killing horses for sale as human food. He wished to know if that license was still in force, to whom it was granted, and where the horse flesh was sold as human food. Alderman Winter, said the license was granted in April, 1892, for six months, to a Mr. Hubert. It was afterwards renewed for 12 months, which expired at the end of the present month, and Mr. Hubert wished to have it renewed for another 12 months. The whole of the flesh of the animals slaughtered was exported to Antwerp. (Laughter.) The killing was principally done during the winter months, as the meat would not keep during the warm weather. No killing was going on at present.

A BIG SALMON PACK.—VANCOUVER, B. C.—The canneries have all closed. The salmon pack is estimated at 471,000 cases, surpassing all previous records by nearly 200,000 cases.

WORKING UP THE MILK SWINDLE, AND WHITEWASHING SOMERSET HOUSE.

The Cheshire farmers met on the 23rd at the Chester Farmers' Club to consider the advisability of memorialising the authorities at Somerset House to reduce the standard in the testing of the quality of milk. Mr. Knowles (chairman) said it was very unjust to convict farmers of adulterating milk when it was only of poor quality. He knew of several instances where farmers had been charged with adulteration when the inferior quality of the milk was due to the season or the method of feeding the cows. Mr. Beecroft contended that samples of milk should be taken by the authorities as it was leaving their farms, otherwise what guarantee was there that it would not be tampered with after leaving their hands. It was well known that cows poorly fed did not give good milk, and in these days of agricultural depression farmers had not the capital to maintain their stock at a high standard. A resolution was carried requesting the Somerset House Authorities to adopt a more reliable standard when making milk analysis.

The cool impudence of this request that the Somerset House ignorami should encourage milk swindling even more than they already do has drawn the following admirable letter from Mr. A. Hailwood to our contemporary the *Manchester Guardian*. Mr. Hailwood says:—

"At a meeting of the Chester Farmers' Club held last Saturday, a question of great importance came before its members, viz., that of the reduction of the Government standard of pure milk. It was proposed, seconded, and carried, that Somerset House should be memorialised with a view to its reduction. This motion I strongly opposed, on the grounds that the official standard is already too low, which I will prove. The Government standard is 9 per cent. of non-fatty solids and 2.5 per cent. of fat. Out of 950 samples sent by me to be analysed, the average result was 13 per cent. total solids, 4 per cent. of that being fat, or equal to 1½ per cent. more than the Government standard. These samples were taken from farms situated in all parts of Cheshire. So that if the standard was reduced it would mean impoverishing the milk supply of Manchester and Salford, which now stand at the head of all the cities and towns in the kingdom with regard to the purity of their milk supply, the percentage of adulteration being Manchester 4.7, Salford 1.3, whereas London is 21.5, Liverpool 17.6, and Birmingham 17.9. One of the speakers at the meeting complained about the farmers being unjustly mulcted in costs on the strength of the Analyst's certificate alone. The remedy lies in their own hands, as at a recent meeting of the Cheshire County Council, held at Chester, the following resolution was passed, viz.:—"That when requested by the County Analyst the Chief Inspector arrange to retain for analysis samples of milk direct from the cows belonging to any milk seller from whom a sample of milk has been previously obtained for analysis, and that the expenses of obtaining and analysing such samples be allowed." If a sample of milk taken from the cows corresponds upon analysis with the sample previously taken no prosecution follows, although the quality may be below that of the standard. One of the speakers, Mr. Joseph Beecroft, made a very serious charge, which I will prove to be unfounded. He said that farmers produce a rich milk and that it is then reduced to Government standard by the milk dealer. In an interview with Mr. Carter Bell, Analyst to the borough of Salford and the County of Chester, to-day, I asked him to give me the average quality of milk taken by his Inspectors from the milk dealers, and he told me that it was from 3½ to 4 per cent. of fat, or a total of solids of 13 per cent., whereas if the milk was reduced according to Mr. Beecroft's Government standard the percentage would only be 1½. Mr. Bell's statement also confirms my argument in favour of the standard not being reduced. This proposed reduction of the standard is a most important question to the inhabitants of Manchester and Salford, and if carried into effect would mean impoverishing the most valuable article of food that the public consumes, more especially the hand-fed infants of the present day.—Yours, &c.,
A. HAILWOOD.

September 25th.

Mr. Hailwood's statements bear out what we have times over stated in this journal, that the mainstay of the milk swindles in this country is the incompetent Somerset House Department.

HOCUSING THE AGRICULTURISTS.

We pointed out the absurdity of appointing a Commission, not one member of which is an expert on adulteration. The *Weekly Times* and *Echo* hits straight from the shoulder at another piece of curious folly on the part of Mr. Gardner saying,

"HUMBUGGING THE FARMERS."

The Government is humbugging the agriculturists with a vengeance! The list of members of the much be-puffed Royal Commission on Agricultural Depression does not contain the name of a single tenant-farmer! A Royal commission of cats to enquire into the depression among mice would be about the analogue of the packed body that is now about to waste time and raise false hopes. Mr. Herbert Gardner appears deliberately to have packed his Commission with representatives of every class that preys on the farmer, and to have studiously excluded the latter from any chance of protesting against this unfair and one-sided investigation. Perhaps it is because, after his own observation of the terrible condition of that part of Essex where he himself rents a residence, he dare not let the present awful state of the rural districts be made public."

The Commission as formed is a pure waste of time and money, and its recommendations will, naturally enough, be worth only contempt.

IMPORTANT TO PUBLIC ANALYSTS AND INSPECTORS.

At Southampton, on September 22nd, a case that should have careful consideration by Inspectors and Public Analysts was decided. The facts were as follows:—

James Flint, a lad, in the employ of Mr. Charles White, Mount Pleasant-road, Southampton, for whom Mr. W. L. Bell appeared, was summoned for having, on the 22nd August, sold to Police-sergeant David Tier, stationed at Bournemouth, new milk which was not of the nature, substance, and quality demanded, but to which water had been added, to the prejudice of the purchaser. Police-sergeant David Tier stated that on the date named he met the defendant at Shirley. The defendant was carrying milk cans, and witness asked for a pint of new milk. After completing the purchase witness divided the milk, according to the provisions of the Act, and offered the defendant a portion. He forwarded a sample to the Public Analyst for the county, from whom he received a certificate. Arthur Angell, Public Analyst of the county, deposed that the certificate produced was given by him, and it certified that he received the sample of new milk produced which he declared in his opinion to be adulterated with at least 10 per cent. added water. Mr. Bell raised the point of law that the certificate did not state from whom the witness received the sample as the Act directed it should, and this he contended was fatal to the case. It was decided that the objection should be dealt with at a later stage, when the case in support of the information had been closed. The witness, in the course of cross-examination by Mr. Bell, stated that he personally conducted all his analyses, though he did not do all the details. The bottle produced could not have been opened in his absence. Witness did not know that the other sample given to the defendant had been analysed by Dr. Redwood, and that he had certified that it had only three per cent. of added water. The witness was cross-examined with reference to a case recently before a London Magistrate, in which milk taken direct from a cow was certified by two analysts, with the knowledge of having seen the milk taken, as having eight per cent. of added water. According to Dr. Redwood's figures, in his analysis, witness would have made the amount seven per cent. of added water. They had based their opinions on different standards. Mr. Bell: On which standard is my poor client to be hung? (a laugh.) At the conclusion of the witness's examination, the case in support of the information closed, and, for the defence, Mr. Bell urged that on two technical grounds he was entitled to have the case dismissed, because the analysis was not made with all convenient speed, the witness not being able to fix the date before the 30th August, which could not be said to be with all convenient speed. His (Mr. Bell's) other objection WAS, THAT THE CERTIFICATE DID NOT STATE THE NAME OF THE PERSON FROM WHOM THE MILK WAS RECEIVED, AND HE CONTENDED THAT ANY VARIATION FROM THE FORM REQUIRED BY THE ACT MUST BE FATAL TO THE INFORMATION. The Bench thought Mr. Bell's last contention was right, and under these circumstances felt they could not do otherwise than dismiss the case. There was another summons of a similar character, but as the certificate was identical with that in the last case, Superintendent Matthews withdrew the information, though the summons was not defended, and he informed the Bench that he would bring the facts before the Chief Constable for the County.

The importance of Mr. Bell's objection to the form of certificate is one that should not be overlooked. Upon this point and the analytical differences, Mr. Angell writes:—

"The following facts in this case should be known to your readers, in order that they may fairly appreciate the situation, or, if not, it may be looked upon as a case in which analysts differ. Dr. Redwood's certificate of analysis was stamped with an india-rubber stamp, to the effect that decomposition had set in to such an extent that the results obtained were somewhat doubtful. Dr. Redwood very properly had made an allowance for this decomposition, and so had stated his percentage of water so low as not to do injustice to the vendor. I had no allowance to make, as my sample was sweet. Further than this the counsel for defence stated (after the decision) that his client's boy (Flint) had purchased milk from an outside source (in order to replenish his supply), the composition of which was unknown to him.

"The use of the words 'by hand,' instead of the actual name of the person delivering the sample, I cannot defend, and on this point I uphold the decision of the Court, and I think that notice of the decision should be taken by all Public Analysts, who may have been doing as I have done for many years."

As Inspectors become more zealous in enforcing the Acts to protect the public against fraud in food stuffs, defending solicitors and experts become more alert in discovering means by which a "coach and four can be driven through the Acts." The extraordinary conditions under which the experiments of Mr. F. J. Lloyd, alleging the presence of 8 per cent. of water in milk direct from a herd of cows were made, we deal with in another part of our journal. It is astonishing that Magistrates should be so ignorant, and Vestry solicitors so careless, as to allow such decisions to pass unchallenged. The result of Mr. Plowden's folly is that every conscienceless milk vendor believes himself safe in adding at least 8 per cent. of water to his milk, and that the wretched defence of that amount of water being naturally present in the milk is being made in nearly every case of a prosecution for added water.

SAVED FROM THE BAGS OF MYSTERY MAKERS.

At Portsmouth, William Andrews, 110, Fratton-road, was summoned for having in his possession, on July 5th, 50 pieces of beef, which were intended for food. Mr. G. H. King prosecuted on behalf of the Urban Sanitary Authority, and Mr. Hobbs defended. Assistant Sanitary Inspector Turner visited the defendant's butcher's shop at half-past two in the afternoon, and on going to the rear he found the defendant cutting up decomposed meat, putting the lean into one place, the fat in another, and the bones in another, while there were several other pieces of similar meat about. He seized the whole, and had it conveyed away. Mr. King: Was the meat being prepared in the usual way for making sausages and polonies? Witness: Yes. Mr. Hobbs elicited that the weather at the time was very hot. Sanitary Inspector Monkoom and Dr. B. H. Mumby both stated that the meat was unfit for food. Mr. Hobbs's defence was that the meat was brought from the Army Stores, in Hyde Park-road, was never intended for food, and was given to the defendant's son to make what he could of at the candle maker's and for manure. Arthur Jennings, the manager of the Army Stores, a Liverpool firm, stated that the defendant had often assisted him, and that he had given him the 400 lbs. or 500 lbs. of meat because it had become unfit for food. By Mr. King: He should consider it a waste of time to cut the meat into thin strips. The Justices' Clerk: But why don't you send such meat to the soap boilers yourself? Witness said he did not know them. By Mr. Hobbs: He thought that about 5st. of fat and 1½ cwt. of bones might have been obtained from the meat. The value of the fat and bones would have been about half-a-sovereign. The defendant's son corroborated, and after a good deal of pressure he admitted that his father had sold meat to the sausage makers in the town. There had been three previous convictions. In 1876 fines of £15 and £5 had been imposed, and in 1881 the fine had again been £5. The Magistrates now said they had no hesitation in convicting the defendant, and the only hesitation they had was whether they ought not to send him to prison without the option of a fine. They were determined to stop the spreading of disease among the poor, if they could, and they fined the defendant 8s. for each piece of meat, £20 in all, and 13s. costs, or two months' imprisonment in default. He was allowed three days to pay.

FOR BEER, £20.

At Wolverhampton, on September 23rd, Abraham Hampton, brewer and publican, was fined by the Stipendiary £20 and costs for defrauding the Inland Revenue by using a larger quantity of sugar in his brewing than he had notified in his brewing paper. The quantity of sugar entered was 7lb., and the quantity used 24lb.

STEALING 30 PER CENT. OF FAT FROM MILK, 10s.

At Chertsey, on September 20th, Joseph Vincent, dairyman, Chertsey, was summoned for selling milk from which 30 per cent. of butter had been abstracted. Mr. C. J. Martin, Inspector under the Food and Drugs Act, stated that on August 25 he received from George Hooker, his assistant, a pint of milk which he had instructed him to purchase from the defendant. Subsequently the sample was divided, and a portion sent to the Public Analyst, who certified it to be deficient 30 per cent. in butter fat. Mr. Brettell (Paine and Brettell, solicitors) addressed the Bench for the defence, but a fine of 10s. was imposed.

HOCUSING THE AGRICULTURIST.

NO EXPERT ON ADULTERATION IS YET APPOINTED.

The following are the names of the Sub-Commission, and the districts selected by the Royal Commission on Agriculture:—Dr. Fream, the Maidstone district of Kent, and the Andover district of Hants; Mr. Wilson Fox, the Garstang district of Lancashire and the Glendale district of Northumberland; Mr. Hunter Pringle, Ongar district of Essex and the Isle of Axholme, Lincolnshire; Mr. Croxden Powell, the Stratford and Avon district of Warwickshire, and the Frome district of Somerset; and Mr. James Hope will investigate selected districts of Scotland, possibly one in Aberdeenshire and another in the Lothians. Dr. Fream is the editor of the journal of the Royal Agricultural Society, and a professor at the Downton College of Agriculture. Mr. Wilson Fox was an Assistant Commissioner on Agriculture to the Labour Commission. Mr. Hunter Pringle was an Assistant Commissioner on Agriculture to the Labour Commission, and for twenty years has been engaged in farming both in Scotland and Norfolk. Mr. C. Powell has been a practical farmer, and has also been engaged in the cheese, and seed trade, and is a member of the Royal Agricultural Society. Mr. J. Hope is a well-known agriculturist in Scotland, and was an Assistant Commissioner under the Duke of Richmond's Commission in 1880-82.

MORE POTTED MEAT POISONING.

Mr. Jones held an inquest at Warrington, on September 19th, on the body of Joseph Willan, who died very suddenly on Sunday. He had partaken of some potted pig's head for dinner, and was found on Saturday night lying in the market-place as if in a fit. Dr. Joseph said the symptoms pointed very markedly to ptomaine poisoning, due to eating unwholesome or decomposed food. The widow stated she had partaken of the same food. A verdict was returned in accordance with the doctor's evidence.

Mr. E. Tidman, C.E., F.S.I., M.S.A., of Westminster, is to read a paper on "Ventilation," in connection with the Church of England Sanitary Association and its department of the Church Congress at Birmingham, on October 2nd.

STAMPING OUT THE WATER IN BUTTER SWINDLE.

FULL PENALTIES WILL BE IMPOSED IN CLARE.

At Kilrush, on the 20th, two farmers named Foley, of Querrin and Cunningham, were prosecuted at the suit of Acting Sergeant Maurice Keane, Inspector under the Food and Drugs Act, with offering for sale in the Kilrush market butter containing an excessive quantity of water amounting to adulteration. Mr. Kelly, solicitor, appeared for the defendants. Mr. P. S. Connolly, of Limerick, said on the representations made to Sir Andrew Reid by the Butter Merchants' Association, the police were appointed as Inspectors under the Food and Drugs Act, under which breaches to a very serious extent occurred, and he allowed them the privilege of his appearing for them in the prosecutions to enforce the Act. The County of Clare was famous for many things, but it was more so for this system of fraud in the continued adulteration of butter sent into the public markets. He had appeared to prosecute at Ennis, Kildysart, Ennistymon, and Miltown-Malbay, where the parties were convicted, and the people of this district knew the law and the penalties that the Court could impose on them—£20 or three months' imprisonment for the deliberate adulteration of butter sent into the market and sold. It was time this practice should be put an end to, which was daily ruining this great industry, which represented sixty-seven millions of money to the country, spread over a great area, and this country was one of the principal sources of supply, and he hoped the Court would impose a penalty that would deter them from perpetrating this system. Evidence having been heard, the Chairman said he took this opportunity of publicly announcing that in any future case that came before them he would inflict the full penalty, as the people knew the law well. A fine of 20s. and costs would be imposed. He was for imposing the full penalty in this case, but the other Magistrates thought that there should be an allowance made on account of the hot weather, and he gave way. A similar order was made in Cunningham's case.

WATER IN BUTTER.

At Ennis Petty Sessions, on September 15th, Sergeant John M'Hugh, Local Inspector under the Food and Drugs Act, had Patrick Hehir, farmer, living at Ballywilliam, summoned for selling fraudulently made up butter in Ennis Market on the 19th August. Complainant gave the necessary evidence showing that he had complied with the Act, and had a sample of the butter bought from the defendant in court. Mr. Dunning, D. I., read Sir Charles Cameron's certificate of the analysis, showing that the sample of butter forwarded to him by the Inspector contained 19.47 per cent. of water; he said 16 was the outside allowed, and even that was too much. Defendant was not professionally represented, and in reply to the Court, said he did not know the butter was bad; he never had had butter. The Chairman: The complaint is that you put water into it. Defendant: The weather was very hot and the butter was soft. Mr. Joynt: You did not take the water out of the butter. The Chairman: You are injuring yourself indirectly, and the sale and price of your butter. Defendant: The butter was bought. Mr. Dunning: Those firkins known to be adulterated are bought in the market. The Chairman: What price did you get. Defendant: I didn't get a good price. Mr. Scott: We had a case where there was 18 or 20 per cent. of water, and only a fine of 10s. was put on. Sergeant M'Hugh: That was the case of M'Mahon, of Ballytigue, and in consideration of his being a poor man, the fine was reduced to 10s. The Chairman: It was a small quantity in a basin. The defendant was fined 20s., with 2s. costs.

HOW DIFFERENT MAGISTRATES FINE.

At the North London Police-court, on September 21st, Henry Milo, greengrocer, 414, Essex-road, was summoned for exposing for sale unsound plums and pears. Mr. Lewis prosecuted for the Islington Vestry. Mr. Frederick Mitchener, the Sanitary Inspector, said that he visited the defendant's shop on the 9th inst., and saw exposed for sale a number of plums and pears. They were decomposed, and totally unfit for human food. Mr. Bros fined him 20s., and 12s. 6d. costs. James Goss, a costermonger, of Bentley-road, Ballspond, was summoned at the same court for exposing thirty-six pounds of putrid haddock, plaice, and bream for sale on a barrow in Ballspond, and was fined 10s., with 12s. 6d. costs. At the Thames Police-court, Mr. George Hay Young, solicitor, on behalf of the St. George's-in-the-East Vestry, asked Mr. Rose to condemn a large quantity of pears, which had been seized by the Sanitary Inspector in Ellen-street. Mr. Rose, having examined the pears, said it was clear they were all unsound, and made an order for their destruction. Mr. W. W. Young, on behalf of the local authorities, applied to Mr. Denman at the South-Western Police-court for an order to condemn a quantity of pears which were seized by Sanitary Inspector Fairchild, at a shop in High-street, Clapham, they being in a condition unfit for food. Mr. Denman, having inspected the pears, granted the necessary order for their condemnation. William Marshall, a fish curer, carrying on business in Tabard-street, Borough, was summoned at Southwark by the Sanitary Inspector of St. George the Martyr, Southwark, for having in his possession, with intent to sell the same, a quantity of herrings which were unfit for human food. Evidence in support of the summons was given by Mr. J. A. Anscombe, the Inspector who seized the fish, and had it condemned by the Magistrate at this court about a fortnight ago. On behalf of the defendant it was urged that the fish, which was sound when purchased, was not intended for sale but for manure. The magistrate fined the defendant £20, and £2 2s. costs.

WEAK MILK FOR WEAK INTELLECTS.

At Highgate, J. Martin, trading at Martin and Co., of Endwell-road, Brookley, contractor for the supply of milk to the Colney Hatch Lunatic Asylum, was summoned by William Tomlin, a Middlesex County Council Inspector, for having sold milk adulterated with 10 per cent. of added water. Mr. Ricketts, solicitor, appeared for the defendant. William Tomlin deposed that on Thursday, August 24, he took a sample of milk from a churn at Colney Hatch Asylum. The churn contained about eight barn gallons. It had on the lid a brass plate engraved, "J. Martin and Co., New Southgate Station," and another plate, "J. Jeffery's, Sudbury." He submitted the sample to the Public Analyst, who certified that it contained 10 per cent. of added water. The defence was that the milk was delivered at the asylum direct from Mr. Jeffery's farm near Sudbury, Derbyshire, and the farmer, Mr. Ricketts said, alleged that it was pure. He would call the farmer, only that it was no use to do so, as the milk had to travel by railway, first of all on the North Staffordshire line, and then on the Great Northern to New Southgate. There were thus many opportunities for it to be watered on the road. Mr. Homan: Are not the churns secured? Mr. Ricketts: No, sir. The railway companies charge by quantities, and in no case are the churns allowed to be locked, because the railway companies have the right to gauge the quantity for themselves. Mr. Homan: What you suggest is that a thirsty guard may take a drink out of the churn and put water in? (Laughter.) Mr. Ricketts: Yes, sir; or a dishonest porter or a man with a large family. Mr. Ricketts also referred to the effect of the prolonged drought on the quality of the milk, as proved in a recent case. Alfred Bowtell, in defendant's employ, gave evidence that the milk was delivered at the asylum direct from the railway station. Walter Boyce, steward at the asylum, said he had complained to the defendant previously of the quality of the milk, as the result of analyses made on three different occasions, and witness communicated with the County Inspector. The Bench fined defendant £5 and costs, including 10s. 6d. Analyst's fee.

A £5 FINE FOR A £200 PER YEAR ILLICIT PROFIT.

At the Leeds City Police-court, on September 21, before Mr. Benjamin Goodman and Mr. T. Rawlinson Ford, John William Carter, farmer, of Seacroft, near Leeds, was summoned for selling two pints of new milk on September 1, which on analysis by the City Analyst was found to contain 10 per cent. of added water. The defendant had in May, 1889, been fined £5 and costs, for a similar offence. The Town Clerk (Mr. J. Harrison) prosecuted, and Mr. J. Child was for the defence. Mr. W. B. Walker (Inspector under the Food and Drugs Act) said that on the date in question he took three samples of milk from defendant's cart. One was found to be adulterated with 10 per cent. of added water, one with 9 per cent., and one just met the requirements of the Act. Cross-examined by Mr. Child: He had taken samples of defendant's milk on five occasions. Mr. Child, for the defence, pointed out that the lack of pasture for the cows during this season of drought was a notorious fact, and he was instructed that that reduced the quality of the milk. In any case the adulteration was small in quantity, and he asked their Worships to draw the conclusion that it was not, if any adulteration had taken place, which he denied, done with the purpose of increasing the profits of the business. The milk was sent out just as received from the cows. The Town Clerk said he was not desirous to press for a conviction in the second case, and thought that might be met by the payment of costs. The defendant sent out at least 160 gals. of milk a day into Leeds. At the rate of 10 per cent. of adulteration that would amount to 16 galls. of added water per day, or an extra profit of 12s. daily—four guineas a week paid by consumers for added water. Mr. Benjamin Goodman said the Bench were disposed to deal leniently with the case. Defendant would be fined £5 and costs, with the costs in the second case.

We must say that this fine very inadequately meets the case. To deal leniently with a man who brings 16 galls. of added water daily into Leeds is most preposterous; the more so as he has been fined £5 and costs upon a previous occasion. It might even have been that twice the amount of water was actually added, as by the Somerset House Officials' great sympathy with and ready assistance to all adulterators this low percentage only could be alleged. The Act allows a £20 penalty, and to inflict less is to put a premium on adulteration.

HE BELIEVED THE LAW ALLOWED HIM TO ADD 4 PER CENT. OF WATER.

At Epping Petty Sessions, on September 15th, William Pierce, a milk seller, of Theydon Bois, was summoned for selling milk adulterated with 16 per cent. of added water. Defendant said he had sold milk in Theydon Bois for twenty-five years, and had had samples taken before, but had never been summoned. He was under the impression that he could add 4 per cent. of water to the milk. He added: Owing to the dry season and the shortness of food we are terribly put to it. Major Tait: Owing to the dry weather and the poorness of the food the milk is poorer than usual, and can therefore stand less water being put into it. (Laughter.) Defendant was fined 10s. and the costs.—Frank Whitlow, farmer, of Theydon Bois, was summoned for selling milk adulterated with 12 per cent. of water. Defendant said he had lately had a new dairy erected, and he had been to the expense of having a new cooler put up to keep the milk cool. Owing to the new place not being completed, he had connected the water supply with the machinery by a length of hose. The pressure of the water was kept high, and the delivery hose pipe not being properly fixed, some water had escaped and got into the milk. Fined 1s. and 10s. costs.

SOMERSET HOUSE AGREES WITH AN ANALYST.

At the County Magistrate's Court, Birkenhead, before Messrs. W. O. N. Shaw, E. H. Harrison, and Alderman Crow, Mark Flood, the licensee of the Plough Inn, Neston, was summoned for selling whisky containing a greater quantity of water than the Act of Parliament allowed.—Mr. Hallard, Assistant Inspector of Food and Drugs, for the County of Chester, stated that on July 17th, he called at defendant's house and purchased half a pint of whisky for 1s. 2d., which he told defendant's wife was for analysis. He divided it into three parts, gave one to defendant's wife, sent one to the Public Analyst, T. Carter Bell, and kept one himself. The analysis showed that the whisky was 28 degrees under proof, whereas it should not have exceeded 25. At defendant's request the third part was sent to Somerset House, and it was returned as being 29 1-10th under proof. In reply to Mr. J. T. Thompson, who appeared for the defence, witness said the whisky was in a decanter. If it had been there since April, some of the spirit would have evaporated, but not so much. In the majority of cases he found the spirits only 18 to 20 degrees under proof.—Mr. Thompson then addressed the Bench, and said that if the spirit had been three months in the decanter, sufficient would have evaporated to cause the over-plus of water. Mrs. Flood would tell them that when she put the spirit in the decanter she tested it with a hydrometer, and then it was only 22 degrees under proof. They were most anxious everything should be done properly, and that there should be no offence. He (Mr. Thompson) had known cases of this kind, in which the whisky had been found 39 degrees under proof. Having heard Mrs. Flood, the Bench said the case was a serious one. She would have to be very careful, because the public must be protected. It was wrong to supply either light weight or inferior quality, and she must take extra care such a thing did not occur again. In this case she would have to pay the Analyst's fees, 16s. 6d.; the costs, 8s. 6d., and a fine of 5s., a total of 30s. This case was first tried at Great Neston, on August 25th, and adjourned for sample to be forwarded to Somerset House.

MORE TINNED SALMON POISONING.

On the 16th, seven persons living in a house occupied by John Wheal, at Billericay, partook of tinned salmon, and on Sunday morning six out of the seven were seized with most acute internal pains, and became seriously ill.

HE COULD HAVE BEEN FINED £4,000.

At Chesham Petty Sessions, on the 20th, Henry Aldridge, fishmonger, of High Wycombe, was charged with exposing for sale in Chesham Market, 200 kippered herrings unfit for human food. The defendant pleaded guilty, and the Bench told him that he was liable to a fine of £20 for each fish, or £4,000 in all. He would be fined £5, and £1 17s. costs, or a month's imprisonment.

THESE WERE NOT TOWN COUNCILLORS.

At Bath County Police-court, Ann Salter, of Lower Swanswick, was summoned for selling coffee with 30 per cent. of chicory, on the 28th of August, and admitted the fact. Police-constable Brunt bought the coffee in question, and paid 3d. for a quarter of a pound. She was fined 10s. and costs. William Clark, grocer, of Twerton, was summoned for a similar offence. The amount of chicory in this case being 40 per cent. Two ounces were purchased by Police-constable Cross. Defendant said he sold the coffee as received from the wholesale manufacturers. The Bench considered this a clear case of adulteration. At the price defendant had asked, the public had a right to expect a genuine article. He would be fined £1 and costs.

A YARN ABOUT A PERAMBULATOR.

At Harlesden Petty Sessions, on September 21st, John Marshall, of the Victory Farm Dairy, High-street, Willesden, was summoned for selling milk from which 10 per cent. of cream had been abstracted. Mr. Robert Watts, an Inspector to the Middlesex County Council, proved taking the sample, and produced the Analyst's certificate. Mr. Moore, for the defence, said the poorness of the milk was largely due to the dryness of the season. The milk was carried in a perambulator, and the joltings it got churned some of the cream into butter. Each time the perambulator stopped the cream or butter would rise to the surface, and some customers consequently would get richer milk than others. Mr. Watts informed the Bench that defendant had been already fined 30s. for a similar offence, and he was now ordered to pay £2, and costs.—Thomas Noad, of Blackbird-hill Farm, was summoned by Mr. Watts for selling milk adulterated with 7 per cent. of added water. Mr. Colam, who appeared for the defendant, said he should have to rely upon the same defence as Mr. Moore had set up in the previous case. In this instance, the Inspector took the sample as the defendant's man brought it from the dairy, so that it was just as he received it from his master. The defendant and his men gave evidence showing that the milk was just as yielded by the cows when the sample was taken. In answer to the Bench, defendant said he had sixty-five cows, and each gave an average of eight quarts per day. He had never heard of a cow giving eight gallons a day. Mr. Bird said it was proved up to the hilt that the milk was just as it came from the cow, and the summons would be dismissed. William Jones, of 8, Rochester-terrace, Willesden, was summoned for selling milk adulterated with 12 per cent. of added water. Mr. Moore defended. The defence was that the milk was sold just as received from the defendant in the last case. The Bench fined defendant 20s., Mr. Bird remarking that someone must have watered the milk.

ALUM IN BAKING POWDER AGAIN.

At the Lexden and Winstree Sessions, on September 23rd, William Field, grocer, at Brightlingsea, was summoned for having sold baking powder which was adulterated. Mr. Asher Prior was for the defence. Supt. Ackers said that on August 11th he visited defendant's shop, and asked to be supplied with some loose baking powder. Mrs. Field, who was in the shop, said she had no loose baking powder, and produced some packets, one of which he purchased for 1½d. He told her that he required it for analysis, and divided it in the usual way, sending one-third to the County Analyst. On August 23rd, he received the certificate from the Analyst, Mr. T. A. Pooley, which stated that the sample contained 38 per cent. of alum. Attached to the certificate was a memorandum, to the reading of which Mr. Asher Prior formally objected, but did not persist. The memorandum stated that in the opinion of the Analyst alum should not be used with an article of food, as it was liable to prove injurious to health; he thought the practice should be stopped. If proceedings were taken the prosecutor might have the case of Warren v. Phillips brought against him, but recently there had been several convictions in the face of this defence on appeal to Quarter Sessions. He found that the powder also contained rice, starch, and bicarbonate of soda, and when the water was added the ground alum, of which 38 per cent. was present, and the bicarbonate of soda, reacted upon each other. Carbonic acid gas was evolved, and alumina and sulphate of soda or glauber's salt produced. The alumina was precipitated in an insoluble form, or in the presence of flour, probably as phosphate of alumina. In his opinion alum was a most objectionable substance to introduce into any article of food, and in some cases might even be injurious to health. Superintendent Ackers, cross-examined by Mr. Asher Prior, said that the parcel in which the baking powder was contained had upon it "warranted genuine." He produced the wrapper. Mrs. Field told him she sold it just as she received it. Mr. Prior said it was a most important case, and a decision on it in a Superior Court would affect a very wide-spread industry. The prosecution was instituted under Section 6 of the Food and Drugs (Adulteration) Act, and he contended that it must fail. In order to making baking powder there were two essential ingredients, an acid, or something equivalent, and an alkali; everything else used was mere padding. Carbonate of soda was the usual alkali, and alum was used as the acid, though tartaric acid was often employed. Alum was preferable, as it acted more slowly, which was a very desirable thing, and prevented the powder from deteriorating if kept in a damp place, and also because it was cheaper. He was not going to contend that the use of alum in bread was to be countenanced, because by its means bad flour might be made to produce what looked like very good bread. Chemists were not of one mind whether alum was injurious to health or not. But even if chemists decided that it was injurious the alum went into the bread, and into the body in an unchanged condition, whereas it was totally different when alum was employed in baking powder. There was all the difference between a mechanical mixture and a chemical compound. The alum in baking powder acted chemically on the other ingredients, and produced a totally different substance—alumina—and other harmless products. He wished to call the attention of the Bench to the extremely ambiguous language of the Analyst—"I think it may be injurious to health." There was no official formula for baking powder. Section 6 said, "No person shall sell to the prejudice of the purchaser any article of food or any drug which is not of the nature, substance, and quality of the article demanded." But Superintendent Ackers asked for baking powder, and got it, so that it could not possibly be said that anything was sold to his prejudice. It would have been very different if he had demanded carbonate of soda and found that it was adulterated. It would have been impossible to have proceeded under the other section (3) of the Act, because nothing had been "mixed" with the baking-powder, in fact it was not baking-powder at all until the alum was put into it. After showing that decisions had been given both ways as to whether baking-powder was an "article of food" or not, and stating that the matter was before the Court of Appeal, pending the decision of which Court many Justices had adjourned cases. Mr. Prior concluded by quoting an opinion of Chief Justice Coleman that the true construction of the statute was that where a seller professes to sell a particular article and sells an article altered by admixture he must be taken to have done that to the prejudice of the customer unless it had been brought to the customers' knowledge. There was, Mr. Prior said, no admixture in this case. The Chairman here stopped the proceedings. In this case (he said) the Bench have heard what Mr. Prior has said, and the facts that Mr. Ackers has brought before us do not justify us in convicting. It is certain that this "B in Hand" baking powder is inferior, or not so wholesome as many that are commonly purchased, and it would be well perhaps for people in the interests of their own health, to buy some other; but we think there is no fraud nor any harm meant. Mr. Asher Prior: I take it, sir, that is simply a personal opinion. The Chairman: It is merely on the Public Analyst's opinion about this particular baking powder. Superintendent Ackers: I contend that there is fraud, and I shall be able to show that the alum placed in here is very much inferior. I ask for a case. The Clerk (Mr. W. H. Jones) said that a case could not be granted on a question of fact. There was no evidence of fraud. Superintendent Ackers: Within seven days I can ask for instructions about a case.

UNSOOUND FOOD.

At Clerkenwell, before Sir Peter Edlin, on September 21st, the hearing of an indictment preferred against Mr. William Palmer, a wholesale meat salesman, of 111, Charterhouse-street, City, for having on July 25th sold a quantity of diseased meat, was resumed. Mr. Horace Avory prosecuted, and Mr. Buckmaster defended. Mr. Buckmaster, for the defence, submitted that the onus of proving that defendant had any personal knowledge that the meat was unsound when it left his premises rested with the prosecution. In this respect the evidence was singularly incomplete. As a matter of fact, the defendant was away on his holiday at the time, and whatever offence had been committed was committed without his knowledge. After some evidence the defendant was called, and corroborated his counsel's statement. He added that his employes had special instructions to call the Sanitary Officer's attention to any meat which had a suspicious appearance. He had been in business in the market twenty years, and during the whole of that time no complaint of the quality of the meat sold had been received from his customers. Mr. Avory said that the prosecution made no imputation whatever on the defendant personally, and were willing to admit that he had always conducted his business with due care. Mr. Buckmaster said that under these circumstances he would advise his client to carry the case no further. After some further legal discussion, the jury by direction of the judge returned a verdict of guilty. Sir Peter Edlin, in giving judgment, said the section of the Public Health Act of 1891 under which the proceedings were taken was somewhat difficult of interpretation, especially on the point as to whether the defendant could be held responsible for the acts of his servants in his absence, and had the case been carried further he might have considered it his duty to have reserved the point for a higher Court. He fined the defendant 40s. because a technical offence had no doubt been committed, but he did not wish to say one word that would reflect on the defendant's character.

MR. LLOYD'S 8 PER CENT. WATER AGAIN.

At West Hartlepool Police-court, on the 16th inst., before Sir William Gray (in the chair) and Mr. R. C. Walker, George Saby, of Forty Acres, West Hartlepool, was charged by Mr. Wheat, Inspector under the Food and Drugs Act, with having sold adulterated milk on the 19th ult. The Town Clerk prosecuted, and Mr. T. Mayson defended. The County Analyst had certified that there was not less than 8 per cent. added water in the sample. Mr. Mayson said the milk was supplied by Mr. Elatob, of Wolviston. Counsel pointed out that cases had been found in which pure milk apparently contained 9 per cent. of added water. The defendant and his wife gave evidence to the effect that no water was added, but that the milk was sold in exactly the same condition as that in which he received it. The Bench imposed a fine of 40s., and 19s. 6d. costs.

LARD AND SOMERSET HOUSE.

At Castle Eden Petty Sessions, on September 16th, Mr. Samuel R. Vann, grocer and provision dealer, Thornley, was summoned for selling lard not of the nature and substance and quality demanded. Mr. B. Scott Elder appeared to prosecute; Mr. Arthur Geissel, West Hartlepool, represented the wholesale dealers, a Liverpool firm; and Mr. Crow, Sunderland, appeared for Mr. Vann. An adjournment was applied for in order to have the analysis of Mr. Stock, of Darlington, the County Analyst (who declared the lard to be adulterated with 5 per cent. of beef stearine), submitted to an independent authority, and, if necessary, to have a test taken at Somerset House. It was understood that Mr. Vann held a warranty from the wholesale dealers, but it was not proposed to put this in until the result of the independent analysis was known. The Bench agreed to the application, and the hearing was adjourned for six weeks.

SHE SHOULD PROSECUTE THE WHOLESALE FIRM.

At the Stratford Petty Sessions, on September 16th, Mrs. Mary Ann Writer, grocer, Valentine-road, Walthamstow, was summoned for exposing for sale as butter a substance which proved, upon analysis, to be margarine. Mrs. Writer said she purchased it as butter from a London firm, and she produced an invoice in proof of this. The Magistrates said they had no option but to convict, but they said the defendant ought to have her remedy against the firm who supplied her. She was fined £1 and costs.

MORE BUTTER CASES.

Herbert Faulkner, cheesemonger, High-street, Walthamstow, summoned for a similar offence, was fined £1 and costs.

Mrs. Emily Jane Millard, provision dealer, Beaconsfield-road, East Ham, was summoned for a similar offence. The defendant denied that the margarine was exposed for sale. Owing to the heat it melted, and to cool it she placed it where it was seen by Captain Kittos. The Magistrates imposed a fine of £1 and costs.

At Dublin, on the 21st, before Mr. O'Donel, Mary Downey, proprietress of "The Cafe," Haroldscross, was summoned by Inspector Baxter, Rathmines, for having sold margarine as butter on the 5th of September. Mr. Hanmore, who appeared for the defence, produced evidence to show that the defendant was not in the habit of selling butter, and she only gave this sample to the Inspector because he demanded it, and said that he should get it. Mr. O'Donel said that he had nothing to do with that. The Inspector got the butter, and only that the defendant appeared to be a woman who was not in very good circumstances he would have imposed a fine of £5. Under the circumstances he would make the penalty £2.

THE BOY AND THE SMART SOLICITOR.

At the Cork Police Court, on the 22nd, a summons was heard at the suit of Sergeant Ralph, local Inspector under the Food and Drugs Act, against John Donovan, farmer, Killeens, for having on the 5th September sold to complainant one and a half pints of milk, same being adulterated, and was not of the substance or quality of milk as that demanded. The prosecution was under the statutes 38 and 39, vic. chap. 63. Mr. A. H. Julian, solicitor, defended, and Mr. B. C. Galvin prosecuted. Mr. Julian, at the outset, raised an objection to Mr. Galvin appearing in the case. Mr. Galvin said he appeared for Sergeant Ralph, who was appointed by the local authority Inspector under the Food and Drugs Act. Mr. Julian said that Sergeant Ralph appeared to prosecute in his capacity as constabulary officer, and though he was appointed under the Act, it in no way stripped him of his character as a constabulary officer. Mr. Galvin said that Sergeant Ralph only appeared in the summons as Inspector under the Food and Drugs Act, to which office he had been legally appointed at a properly constituted meeting of the Town Council of the Borough of Cork. Mr. Julian said that the appointment was only under the signature of Mr. Galvin, who was but an officer of the Corporation, and had no authority to make any such appointment. Mr. Galvin said the appointment of Sergeant Ralph was properly made. Alderman Sheehan said if Mr. Julian did not like the decision of the Bench he could appeal against it. Mr. Julian said that was rather a summary way of dealing with a legal objection. Mr. Atkins said the Bench were satisfied with the legality of Sergeant Ralph's appointment, and that Mr. Galvin was entitled to appear for him. Mr. Julian said as he had been invited he would take the case further. For that purpose he asked the Bench to take a note of his objection, that there was no legal evidence of the appointment of Sergeant Ralph, and further that his authority to prosecute, which was produced, was irregular and illegal, as it was only signed by Mr. Galvin, who was an officer of the Corporation. Sergeant Ralph deposed that he bought a pint and a half of milk for 2d. from James Stuart, a servant boy in the employment of the defendant. The money had been supplied by the Corporation to witness for the purpose. Having bought the milk he told the lad that he intended to have it analysed, and he offered one-third of it to the boy, who refused to take it. Mr. Galvin produced the certificate of Mr. O'Mahony, City Analyst, who stated that the sample of milk was adulterated with at least 5 per cent. of water, when compared with the lowest quality of natural milk. James Stuart, a lad about 17, said he was in the employment of John Donovan, of Killeens, and for the past six months he brought milk into the city. To Mr. Julian: It was to Mrs. Ellen Dennehy, of Clarence-street, he brought the milk, and it was to oblige her he went about with the cart. Mr. Julian: Do you bring the milk to Mrs. Dennehy for her to sell it? Witness: I do; but I saw the water being put into it in the yard. (Laughter.) Mr. Julian: Don't be so smart. Answer my question. Does Mr. Donovan sell a pint of milk in the city except to Mrs. Dennehy? Witness: No. Mr. Julian: Had you any authority to sell it to anybody but Mrs. Dennehy? Witness: I had not. Mr. Atkins: Where was the water put into the milk? Witness: Mr. Donovan's yard. Mr. Atkins: Who put the water in? Witness: The servant girl. Alderman Sheehan: Do you know how much water was put in? Witness: I don't know. The servant girl put the water in with a bucket, and the bottom of the churn was covered with water. Mr. Julian: On what date did you see the water put into the churn? Witness: I saw it always put in. (Laughter.) Mr. Julian: For the six months? Witness: Yes. Mr. Julian: Did you ever tell Mr. Donovan about it? Witness: I did not. Mr. Julian: Did you ever tell Mrs. Dennehy about it? Witness: I did not until after this milk was taken by the sergeant. Mr. John Donovan, the defendant, said he had a contract for twelve months to supply 25 gallons of milk, daily, to Mrs. Dennehy. He never had the least knowledge that water was put into the churn, as described by the boy Stuart. The Bench imposed a fine of £3 and costs, or in default a month's imprisonment on the defendant. The Ellen Dennehy referred to in the above case was prosecuted for a like offence. Her defence was that she had a warranty from Mr. Donovan with the milk. The Bench believed that Mrs. Dennehy knew nothing of the adulteration of the milk, and the case was dismissed. Dr. Dunlea appeared for Mrs. Dennehy. John Harrington was prosecuted for a like offence. His wife was a milk vendor, and she said she bought the milk from a Mr. Burke, a farmer, whose cart came into the city by the Blackpool-road. She did not know where Burke lived. Mr. Galvin said that the defendant would be able to get Burke to recoup him for any penalty that would be imposed. Alderman Flavin said the police would be able to find out for Mrs. Harrington where Burke lived. Mr. Galvin said that the sample of milk sold by Mrs. Harrington was adulterated with 9 per cent. of water when compared with the lowest standard of natural milk. A fine of £2 and costs was imposed.

MAGISTRATES ENCOURAGE THE SALE OF ROTTEN FOOD.

At Brierley Hill, on September 18th, Isaiah Parkes, greengrocer, Hart's Hill, was charged with exposing for sale in the market a quantity of cucumbers unfit for the food of man. Mr. Waldron prosecuted, and Inspector Alden gave evidence in support of the charge. Defendant denied that the cucumbers were intended for sale. The Bench fined him £1 14s., including a guinea solicitor's fee, or a month in default.—George Henry Green, fishmonger, was charged with exposing for sale a quantity of herrings unfit for the food of man, and also four boxes of unsound kippers. Defendant denied that it was his stall where the fish were, but the Bench were satisfied with the evidence against him, and fined him 2s. 6d. and costs in each case, or 14 days in default.

WATERING THE SPIRITS.

At Ashbourn Petty Sessions, on September 9th, Elizabeth Burton, of the White Hart Hotel, Ashbourn, was summoned, on the information of Captain H. Stair Sandys, under the Food and Drugs Act, for selling, on the 15th of July last, to William Marples, eightpennyworth of whisky, which was not of the nature, substance, and quality demanded, the same being mixed with water. Mr. H. Burton appeared on behalf of his mother. Captain Sandys said that on the 15th of July he sent Wm. Marples to Mrs. Burton's to purchase a sample of whisky. He followed him into the house, and received from him two glasses of whisky. He saw Mrs. Burton in the bar, but it was the barmaid who supplied the liquor. He took the whisky and divided it into three parts. One he sent to the County Analyst, one he handed to Mrs. Burton, and the other he kept himself. The samples were sealed up in the presence of the barmaid. The result of the analysis showed that there were 80.7 parts of whisky of the lowest strength, 25 under proof, and 19.3 of water. The standard was 25 under proof, but the sample was about 39 under proof, or, in other words, it contained nearly 20 per cent. of water. In answer to the Bench, witness said that it contained more adulteration than he usually found. In reply to Mr. Burton, he said that the actual strength of the spirit was 39.2. Wm. Marples spoke to purchasing the liquor, saying that he asked for "two fours," and it was served in two glasses. He paid for them, and handed them to Captain Sandys in exactly the same condition as he received them. By Mr. Burton: He did not hear Captain Sandys say, "Get another fourpennyworth as quickly as you can?" Mr. Burton then addressed the Court. He said that he was quite unaware that the spirit was adulterated. It was kept in a keg with a hole in the top. The only way he could account for its weakness was that the cork had not been put into the hole—this was very probable—and the spirit had evaporated. He then called Samuel Slack (servant to Captain Sandys), who denied hearing his master say "Get another as quickly as you can." The Bench said that as this was the defendant's first offence, they would fine Mrs. Burton £3 and £1 4s. costs.

At Malling Police-court, Caleb Unicombe, landlord of the Woolpack Inn, Yalding, was charged with selling adulterated whisky, on August 8th. Superintendent Lane, said he went to defendant's house, and bought some whisky, telling his wife that he was going to have it analysed. He had had it analysed, and found it to be 6.8 below the limit. Defendant, who said he was ill in bed at the time, was fined £1 and costs.

At Havant Petty Sessions, on the 16th, Thomas Doyle, of South Hayling, was summoned, under the Food and Drugs Act, for having sold brandy which was not of the nature and substance demanded. As the spirit was only 3½ degrees below the recognised standard, an adjournment for one month was granted in order that an independent analysis might be made at Somerset House.

At Malling Police-court, John Riseborough, landlord of the Merry Boys, East Peckham, was charged with selling adulterated rum, on the 5th August. Inspector Lane said he went into defendant's house, and bought a quantity of rum. He asked the defendant to divide it into three parts, as he wanted to analyse it. Defendant did that, but while witness was doing it up into separate parts, he said, "may I give it to you from another place, because I don't think that is quite right." The Bench imposed a fine of £1 and costs.

At Ashbourn, Harry Fogg was summoned for a similar offence in respect of sixpennyworth of gin, the same being 2½ per cent. under the 35 under proof, which was the legal allowance. Defendant, who was ill, did not appear, but Mrs. Fogg appeared for him. Captain Sandys said this was a case in which the adulteration was only slight, but he felt obliged to bring it before their Worships' notice. However, he did not wish to press the case, and he was willing to withdraw it if defendant would pay the costs, and the Bench would allow him to take that course. The Magistrates consented to this, and Mrs. Fogg paid the costs, which amounted to 15s. 6d.

REFUSING TO SELL FOR ANALYSIS.

At Liverpool Police-court, on September 20th, Caroline Gray, milk dealer, 14, Bourne-street, was summoned for having refused to sell milk to Inspector Baker, of the Sanitary Department of the Corporation. The Inspector stated that on Sunday last he visited the defendant's shop, and asked permission to go into the dairy. She immediately hurried into the parlour, where the milk was kept, and, lifting up a large basin which contained milk, was about to throw it away. Witness stopped her from doing so, and demanded a sample, but defendant threw the milk into a mug containing buttermilk. Witness informed her that he would report the matter, and defendant replied that the milk was only part of what had been used for baking purposes. On the 2nd of February, 1887, the defendant's husband was fined 10s. and costs for adulteration on the same premises. Mr. Stewart imposed a fine of 10s. and costs.

A WEIGHTS AND MEASURES PROSECUTION.

At Chertsey, on September 20th, George T. Tilley, coal merchant, Addlestone, was summoned for having in his possession for use in trade, a weighing-machine, which was unjust, on September 10th. Inspector Martin stated that the scales, which were intended for use in weighing coal, were absolutely useless for weighing purposes. The defendant was fined 40s. and 11s. 6d. costs.

At Clerkenwell, on September 20th, Tom Henson, of 239, Goswell-road, was summoned for exposing, on August 29th, eleven pieces of meat which were unsound and unfit for human food. Defendant pleaded that the meat must have turned bad suddenly, owing to the extreme heat. He was fined £5.

INCORRECT SUMMONSES AGAIN.

The perfunctory manner in which Food and Drugs Acts work is done was revealed again at Southwark Police-court, where Inspector Broadhead, St. Saviour's Board of Works, summoned a milkman named Taylor for exposing milk for sale containing 8 per cent. of water, and deficient of butter fat to the extent of 20 per cent. The Inspector said he entered the defendant's shop, and asked for two-pennyworth of milk. Some of it was sent to an Analyst, and upon the certificate received, [a summons was issued. Mr. Slade said a summons could not contain two complaints; one must be withdrawn. Inspector Broadhead then withdrew the complaint as to the addition of water. Mr. Rickett, solicitor for the defence, submitted that the certificate was not made out according to schedule. The different parts of which the article was composed should be stated, so that defendant could have obtained the opinion of another Analyst. Mr. Kennedy took the same view of the matter and dismissed the summons.—The following case is even more surprising: Florence James was summoned for exposing whisky from which 31½ per cent. of water had been abstracted. Mr. Sydney, solicitor for the defence, said that when water was abstracted from whisky it did not lessen the strength of the whisky. Inspector Broadhead saw the mistake and asked leave to amend the summons. Mr. Kennedy would not allow him to do so, and said, "If people were so careless as to make such mistakes they must put up with the consequences. The summons was dismissed.

The manner in which authorities work or shirk the Food and Drug Acts is almost too slipshod for belief. There is no examination as to a man's qualifications for the post of Food and Drugs Act Inspector. The work is thrust upon a Sanitary Inspector, who overwhelmed by sanitary work, has no time to follow the various decisions under the Food and Drugs Acts, and master the thousand-and-one points that can be raised by able solicitors like Mr. Ricketts. Cases are lost, and the Acts stultified by this slovenly method of administration. In country districts, a policeman often takes the samples, and oftener than not the County Council does not even supply him with this Journal that he may know something of the working of the Acts. There are examinations for Sanitary Inspectors. It is high time there was one for Food and Drugs Act Inspectors, and that the appointments of Sanitary Inspector and Food and Drugs Act Inspector were separated. A man may be an excellent Food and Drugs Act Inspector and be a fool at sanitary work, and vice versa. It is notorious that in the districts where experienced Food and Drugs Act Inspectors are appointed solely to carry out Food and Drugs and weights and measure work, nothing is heard of cases being dismissed, and the Acts being made ridiculous by faulty summonses or incorrect procedure in the taking of samples.

PUTREFACTION AND TUBERCULOSIS RUIN A BUSINESS.

At Oldbury Police-court on the 19th inst., before Messrs. J. E. Wilson and H. Heaton, Charles Sharpe, butcher, of Talbot-street, Oldbury, was charged with exposing for sale on premises in Freeth-street, a fore-quarter of beef which was diseased, unsound, and unwholesome, and therefore unfit for human food. Mr. W. F. Vernon appeared to prosecute on behalf of the Local Board. Mr. G. H. Robbins (Sanitary Inspector) deposed to visiting the defendant's shop on the 12th of May. He found a quantity of meat exposed for sale, including a fore-quarter of beef, which he considered bad. The meat was dark in colour, and the membrane from the inside of the ribs had been removed. This was the usual practice, when an animal had suffered from tuberculosis, in order to destroy the traces of disease. The carcass was in a state of putrefaction. Dr. Cunningham (medical officer) gave a certificate to the effect that the animal had suffered from tuberculosis, and that the meat was unfit for human food. Mr. Vernon asked the Bench to inflict a heavy penalty, as the defendant must have known that the meat was bad. Defendant denied this, and said the case had ruined his business. The Bench considered it a very bad case, and fined defendant £10 and costs, in all £13 14s. 6d., or in default fourteen days' imprisonment, with hard labour.

A PREVIOUS CONVICTION AND 10s. FINE.

WILL THE LOCAL GOVERNMENT BOARD WRITE TO THESE FEARED ENCOURAGING MAGISTRATES.

At the Barnsley Court House on September 20th, John Wilkinson, milk seller, Darfield, was charged under the Food and Drugs Act, with having sold a quantity of new milk which was adulterated with water to the extent of 10 per cent., on the 13th of September. Mr. C. J. Tyas prosecuted on behalf of the Barnsley Union Rural Sanitary Authority. The case was proved by Inspector Thomas John Hall, who purchased the milk, and sent it to be analysed. Defendant had been previously convicted in September, 1890, and the Bench again fined him 10s. and costs.

At Barnsley, on September 20th, Kato Beckett, milk seller, Barnsley, and Charles Banks, milk seller, of Swaithe, were charged under the Food and Drugs Act with selling milk which was adulterated with water at Barnsley. The defendants were fined 20s. each and costs.

MR. LLOYD'S OPINIONS DECLINED WITHOUT THANKS.

At the South West London Police-court, on September 20, George Tasker, of Sleaford-street, Battersea, was summoned by the local authorities for selling milk deficient by 30 per cent. of its original fat. Mr. Moore, on behalf of the defendant, argued that the deficiency was the result of an accidental circumstance. The cream always rose to the surface, and in consequence of the dipping to serve customers the deficiency occurred. Mr. Hopkins imposed a penalty of 10s., with 12s. 6d. costs.—George West, of 2 Pagaen-street, Battersea Park-road, was also summoned for selling milk adulterated with 22 per cent. of added water. Mr. Moore desired to quote the opinion of Mr. Lloyd, who gave evidence in a case of adulteration at another police court, but as he was not in attendance, Mr. Hopkins declined to receive it, and imposed a penalty of 20s., in addition to 12s. 6d. costs.—William Tijou, of Victoria-place, Havelock-terrace, Battersea, was fined 20s. for a similar offence.

At Waterford Petty Sessions, a fine of £3 and costs was imposed on a woman for exposing milk for sale from which 20 per cent. of the fatty matter had been taken.

At Dublin, on the 19th inst., Inspector Walsh prosecuted Catherine Atkinson, of Grove-road, Rathmines, for selling milk adulterated with 14 per cent. of water. A fine of £1 was imposed. Robert Bradley, of Upper Rathmines, was also summoned by the same Inspector for selling milk adulterated with 18 per cent. of water. Mr. Bradley made the defence that the man the milk was taken from was not in his employment. The Inspector swore positively that the man was. The Magistrate allowed the case to stand over for a week to have the man summoned as a witness.

At Whitehaven Police-court, on Thursday, September 14, Archibald Beattie, milk dealer, Bransty, Whitehaven, was summoned under the Food and Drugs Act for selling milk adulterated with water at Whitehaven, on the 21st of August. Superintendent Kelly stated that about half-past six o'clock on Monday, the 21st of August, he purchased a sample pint of new milk for analysis. He now produced the analysis. He also took a sample at the byre on the following Friday. Defendant kept seven cows. The milk had been adulterated with water to the extent of 19.9 parts of water. The sample taken at the byre was all right. Defendant said he was very sorry it had happened. Fined 40s. with the alternative of one month's imprisonment.

£20 FINE FOR SWINDLING THE PAUPERS.

At Dublin, on the 15th inst., before Mr. Swift, Nicholas Hughes, 208, Great Britain-street, was summoned by the Dublin Corporation, as the sanitary authority, prosecuting on behalf of the South Dublin Union, for having supplied to the Union new milk from which 40 per cent. of its fats had been abstracted, equivalent to an addition of 30 per cent. of water. Mr. Hughes had been previously fined £10, and, the offence being now proved, Mr. Swift said he could not impose a less fine than £20. Mr. M'Sheehy, solicitor, appeared for the Corporation.

There will shortly be published a new regulation prepared by the Russian Department of Trade and Manufactures respecting the manufacture of margarine and artificial butter. This regulation touches not only the methods and conditions of the production of margarine, but also the control of the sale of this butter substitute. Control will be exercised through the aid of special Inspectors, who have received technical or medical instruction. Their duty will consist in visiting these establishments and making an analysis of the products. In the event of an infringement of the regulations, they will be authorised to impose a fine on the offenders, and also to enforce the closing of such works. In establishments engaged in the margarine and artificial butter trade, the sale of all products of cream butter will be prohibited. The establishment of margarine factories will only be authorised in cases where it is shown that they may be supplied with fresh animal fat coming from slaughter-houses placed under the direct superintendence of the veterinary department. Further, the slaughter-houses can only send to the factories the fat of cattle slaughtered the same day.

FOOD AND DRUGS ACT REPORTS.
SHEFFIELD.

The report of Dr. Harvey Littlejohn, Medical Officer of Health for 1892, shows that during that year the following samples were purchased for analysis:—Milk, 114, of which 31 were of inferior quality, 20 adulterated; butter, 30, of which six were adulterated; coffee, 15, 2 adulterated; gin 6, one adulterated; whisky six, one adulterated; lard 12, all genuine; pepper 16, one adulterated; 36 samples of water were also analysed, as usual, the fines imposed by magistrates were shamefully inadequate. In no case was the full penalty inflicted, and the highest penalty for butter adulteration was £2. With magistrates thus encouraging thievery the task of protecting the public from fraud is as arduous as it is thankless. Surely the Sheffield press ought to have something to say about so scandalous an exhibition of magisterial encouragement of plunder upon the public. The following remarks by Dr. Harvey Littlejohn ought to open the magistrates eyes to the grave importance of the question of pure food.

"Considerable attention has been paid to the carrying out of the above Acts during the year, and there is a large increase in the number of samples purchased, especially of milk. The importance of preventing adulteration of articles of food and drugs need not be discussed, nor the benefit which accrues both to the consumer and retailer by ensuring the sale of wholesome and unadulterated articles, but a glance at the table will suffice to show how inadequate the purchase of so small a number of samples must be in a large Borough like Sheffield, with its hundreds of shops, if it is intended that the provisions of the Acts are to be strictly and efficiently enforced. Unfortunately the purchase of samples takes up a considerable amount of time, and as the duty is performed by the district Nuisance Inspectors, I have hesitated to allow other work to stand in abeyance so as to permit of more time being devoted to this duty. The results of the milk analyses are seen to be far from satisfactory, and show an amount of sophistication of this most important food which ought to be dealt with rigorously. Where thousands of gallons of milk are being brought into the town daily by hundreds of dealers, it is clearly impossible to exercise proper control over the supply, unless the authorities are supported by the infliction of adequate fines on conviction. Adulteration of milk is a very paying business, and on this ground alone larger penalties might well be inflicted, and would do more than anything else to put a stop to adulteration and the fraud on the public."

LINCOLN.

The report of Dr. Charles Harrison, Medical Officer of Health and Public Analyst for Lincoln, states that during 1892, 26 samples of milk, 12 of butter, 12 whisky, 11 bread and 4 coffee, were submitted for analysis. 1 butter, 3 milk and 3 whisky were found to be adulterated. As usual, the magistrates encouraged fraud by inflicting fines of 10 to 25 shillings.

WAKEFIELD.

Dr. Edward Mitchell Chaplin, has been appointed City Analyst. Dr. Chaplin was educated at Silcoates, and whilst there passed the Cambridge Local Examination in the honours division. He was for six years with Mr. Thomas Fairley, the Analyst to the Leeds Corporation, and for a time held the position of senior assistant to that gentleman. He then went to London where for eighteen months he was in the analytical and pharmaceutical laboratory of Messrs Hearon, Squire, and Francis, and for about two years, until very recently, he was a student at the University of Wurzburg, under Professor Emille Fischer, one of the first scientists of the Continent. He has since taken with honours the degree of Doctor of Philosophy.

ANSWERS TO CORRESPONDENTS.

J. E. MORRIS.—It is nearly a month since they were decided and they would have been too late for our journal even had we not reported them in issue September 9th. We are always pleased to receive cases of importance, but they should reach us within two to three days after the date of the hearing.

GRIMBLE'S MALT VINEGAR

Guaranteed BREWED and free from ANY ADDED ACIDS.

GRIMBLE & Co., Limited, Cumberland Market, London, N.W.

SIDNEY ORD & CO.'S
HIGH-CLASS JAMS.

ABSOLUTELY PURE AND FREE FROM ARTIFICIAL COLOURING.

1, SOUTHWARK PARK ROAD, LONDON, S.E.

THE MOST POWERFUL DISINFECTANTS OF THE PRESENT DAY ARE

HIGHLY CONCENTRATED AND
SPECIALLY PREPARED FOR

Hospitals, Surgeries,
Asylums,
Local Boards,
Workhouses, Schools.



In 1, 3, or 10 Gallon
Iron Drums
(for Large Public In-
stitutions).

Larger Quantities specially
quoted for.

Write for Samples and Prices to **Whalley's Sanitary Fluid Co., 56 & 57, Aldermanbury, London, E.C.**

MALT VINEGARS.

WE guarantee all the Vinegars we are sending out to be brewed from MALT and BARLEY only—without the addition of RICE, MOLASSES or SUGAR—and that no description of ACID is used in the production of our Vinegars.

Brewery, Birmingham.

FARDON'S VINEGAR Co., Limited.

EDWARDS' DESICCATED SOUP.
IN FOUR VARIETIES.

BROWN—Beef and carefully selected garden Vegetables.

GRAVINA—EDWARDS' Gravy Powder.

WHITE (VEGETABLE)—A purely Vegetable Preparation.

TOMATO—Containing all the valuable, agreeable, and health-giving properties of the fresh tomato, perfect and unimpaired.

Sold by all Grocers, &c. Cookery Book, post free. SOLE MANUFACTURERS—

FREDK. KING & CO., Ltd., 3-6, CAMOMILE STREET, LONDON, E.C.

BANCROFT'S LARD.

BOAR'S HEAD BRAND.

ABSOLUTELY PURE.

We guarantee our Lard to be perfectly free from water or any other adulteration. We only make **ONE** quality, viz. :—

ABSOLUTELY PURE LARD.

BANCROFT & CO., Ltd., Lard Refiners, LIVERPOOL.

SICILIAN WINE VINEGAR,
GUARANTEED ABSOLUTELY PURE.

The purest of Vinegars; guaranteed to stand any Analytical test; pure from start to finish; needing no distillation, but a natural unsophisticated product, ensuring perfect digestion not possible in the various manufactured Acetic Compounds.

To be obtained of all the principal Grocery Establishments and Stores.
Write for Samples and Prices to

READ & DIGHT, Sole Proprietors, 72, Mark Lane, London, E.C.

Food and Sanitation,

THE ANTI-ADULTERATION JOURNAL;

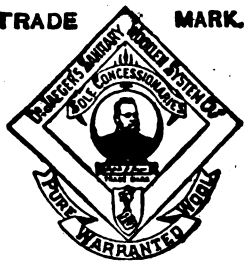
To protect the Public from Adulterations of every kind. A Newspaper to support English, Irish, Scotch and Welsh Industries, and to suppress Foreign Free Fraud in all imported articles. A Journal for manufacturers, Merchants, Wholesale and Retail Traders, Grocers and Provision Dealers, Dairy Farmers, English and Irish Produce Merchants and Bacon Curers, Pure Beer Brewers, Distillers, Fruit Growers, and Agriculturists.

Published Weekly by M. HENRY, at 183, Strand, London, W.C.
Subscription per annum, Post Free, 6s. 6d.

TESTED FOR PURITY - NON-SHRINKING AND STRENGTH

Protection from Chill in all Climates.

TRADE MARK.

**JAEGER PURE WOOL CLOTHING.**

The Best is the Cheapest!
Fixed, moderate prices for first quality.

The "JAEGER" Goods are tested for Purity in the Company's own Laboratory and Guaranteed by this Trade Mark, without which none are genuine.

Dr. Jaeger's "Health Culture," and Jaeger
 Company's Price List, sent free on application.

WEST-END JAEGER DEPOTS:

8 & 4, PRINCES STREET, CAVENDISH SQUARE (near Regent Circus).
 126, REGENT STREET (near the Quadrant).
 30, SLOANE STREET (adjoining McPherson's Gymnasium).
 456, STRAND (near Trafalgar Square).

CITY JAEGER DEPOTS:

85 and 86, CHEAPSIDE (near King Street).
 158, FENCHURCH STREET (near Lime Street).
 42 and 43, FORE STREET (near Moorgate Street Station).

BOVRIL

Contains in an

EASILY DIGESTIBLE FORM
 the **ALBUMEN** and **FIBRIN**,
 the **NUTRITIOUS CONSTITU-**
ENTS of PRIME OX BEEF.

BOVRIL, Ltd.,

Food Specialists,

LONDON.

Directors } Rt. Hon. LORD PLAYFAIR, K.C.B., LL.D.
 { ROBT. FARQUHARSON, Esq., M.D., M.P.,
 &c., &c.

Food and Sanitation.

SATURDAY, OCTOBER 7, 1893.

THE QUEER MILK CASE.The *British Medical Journal* of September 30th says:—**WHAT IS MILK?**

"The ways of the milkman are various, and we have no wish to make ourselves his advocate; at the same time the present condition of affairs in regard to the adulteration of, and abstraction from, that necessary article of diet is so anomalous, not to say absurd, and is so direct an incentive to fraud, that it is earnestly to be wished some termination should be put to it, even if legislation had to be invoked for the purpose. With gross adulteration, the addition of substances foreign to the material, the law can deal well enough; but when it becomes a question, as it mostly does in regard to milk, of the addition of a surplus quantity of a substance which already exists in it in very variable amount—to wit, the water—or the abstraction from it of the cream, the exact proportion of which in normal milk is not, and cannot be, defined by law, the difficulty becomes extreme. This has long been a cause of difference between the Public Analysts and Somerset House, and recent magisterial decisions obviously open the door to the lowest standard which can be proved by witnesses to have flowed from a cow. This is a most unsatisfactory

CALVERT'S CARBOLIC OINTMENT,

Large Pots, 13½d. each, with full Instructions.

Court Circular says: "We cannot too highly recommend Calverts' Ointment. It is the best general Ointment with which we are familiar, and ought to be a stock remedy in every household."

Private report from Limassol Cyprus: "I have never found anything to come up to it for neuralgic 'Rheumatic Pains.'"

Samples sent Free by Post on receipt of value.

F. C. CALVERT & CO, MANCHESTER.

Awarded 60 Gold and Silver Medals and Diplomas.

DISINFECTION WITH "SANITAS."

A very careful investigation just made by Dr. A. B. GRIFFITHS proves that "**SANITAS**" **DISINFECTANTS**, readily,

kill all Disease Germs, including the Microbes that cause

CHOLERA, FEVERS & DIPHTHERIA.**"SANITAS" DISINFECTANTS**

are Fragrant, Non-poisonous, and do not stain. They embody all the healthful principles of Pine and Eucalyptus Forests, and are the best for general use.

Copies of Dr. GRIFFITHS' REPORT, together with full particulars of

"SANITAS" DISINFECTANTS & "SANITAS" APPLIANCES

Will be sent free on application to

The "**SANITAS**" Company, Lim., Bethnal Green,
LONDON, E.

state of affairs. No one pretends that such milk is good, or that it is fair to charge the public the average price for it, yet it is milk all the same if a similar product can be squeezed out of an apparently healthy cow before a reliable witness. If it is impossible to fix a standard, as the public analysts have long wished to do, below which nothing shall be considered milk, it does not seem unreasonable to ask that at any rate milk shall be classified as say, first, second, and skim, in accordance with the quantity of solids and fat which it contains, any lack of either of its ingredients throwing it at once into the lower class. Considering the enormous proportions of the milk trade and the degree on which the milk question touches the life and health of the people, not to mention their pockets, this would seem a not unfitting subject for special legislative action, separate from the general law as to adulteration."

We are glad our contemporary has called medical attention to the case, in which it was alleged that the 8 per cent. watered milk flowed from the cow. The *British Medical Journal*, however, seems to regard it as proved that such was the fact. We would point out that it was not *proved*, but *alleged*. No independent Analyst or representative of the prosecution saw the seventeen cows milked, and the analytical figures have not been disclosed. For our part we must refuse to believe that the milk in question contained 8 per cent. of water, unless the figures of the analysis be given. In the public interest, we challenge those concerned with the defence, where the 8 per cent. of water was alleged to be present in the milk as it came from the cow, to produce the figures; and if, after this, the analytical figures continue to be kept, as they have hitherto been kept—secret—our readers will be quite able to draw their own conclusions as to the reasons for the secrecy. In any event, they will be, we feel certain, quite justified in pointing out to magistrates, in cases where Mr. Plowden's stupid decision is brought forward by the defence, the peculiar conditions under which the experiments were made (referred to in our last issue), and the fact that the figures alleging the 8 per cent. of water to be naturally present in the milk as it came from the cow, have not one atom

of independent verification. Milk adulteration, thanks to the sympathy of magistrates who inflict 2s. 6d. to 10s. fines, and the fraud fostering Somerset House standard, has long been an intolerable scandal. What it will become, if hole-and-corner analyses of the 2s. each order are to be everywhere accepted by ignorant, credulous magistrates of the Plowden type is fraught with so many grave consequences to the public, that at any cost a firm stand must be made against outrages upon fact and justice. Milk, as Dr. Alfred Hill recently well said, "may fairly claim our first consideration, inasmuch as it is a perfect food, and the first that nature provides for the young mammal. Not only so, it is the food which is best in the second as well as the first childhood of man, when the powers of life are on the wane, and it is, moreover, the one food upon which he depends chiefly in very many cases of illness; it is, *par excellence*, the food of the invalid." Those who tamper with its purity, or open the way for further frauds in this food, incur a very grave responsibility, of which it is well our magistrates and others should be thoroughly reminded.

BEWARE OF SO-CALLED GUINNESS'S STOUT, YOU CAN NEVER RELY ON GETTING IT GENUINE.

At the Kesteven Sessions, held at the Town Hall, Bourne, Lincolnshire, on September 28th, William Barrand, brewer and liquor merchant, of Billingborough, was prosecuted by Messrs. Arthur Guinness and Co., Limited, of Dublin, for offences under the Merchandise Marks Act. Six summonses had been taken out. The defendant was first charged with applying a false description to goods; second, for causing a false trade description to be applied; and third, with selling goods to which a false description had been applied. Mr. Jessop prosecuted, and Mr. Page appeared for defendant, who pleaded guilty. It was announced that under the circumstances only one charge, that of selling, would be proceeded with. Defendant, who is agent for Messrs. Guinness and Co., Limited, mixed his own beer with their stout, placed it in bottles supplied by that firm, and sold it under their trade mark. An analysis showed the stout had been mixed with about one-twelfth of defendant's beer. Mr. Page expressed the opinion that great ignorance prevailed amongst traders as to the provisions of the Merchandise Marks Act. The Bench imposed a fine of £20 and costs, which amounted to £19.

THE MANCHESTER CHAMBER OF COMMERCE AND PALM KERNEL ADULTERATION.

In reply to the representations of the Chamber respecting the desirableness of appointing an Inspector of Produce at Lagos, for the prevention of adulteration, chiefly of palm kernels, a long letter has been received from the Acting Governor, deprecating the prosecution of offenders at present, as likely to check the flow of produce to Lagos. In confirming the proceedings of the African Sectional Committee hereon, the Board authorised the despatch of a letter to the Colonial Office, pointing out that the loss of trade to the colony owing to adulterated exports was at least £50,000 a year, that no one would be more benefitted than the original producer by the cessation of adulteration, and that there was no practical difficulty in discriminating between accident and fraud.

A FOOL UPON A PUBLIC ANALYST.

Our contemporary, *The Meat Trades Journal*, of September 30th, has the following from a correspondent:—

Above all things our Magistrates should be practical men, and deal in such matters as men of common sense, and hold the scales of justice evenly, and Inspectors should be above all things men of experience, and have sound practical knowledge of the matters with which they have to deal, and be specially selected for the positions they hold. At Marylebone Police-court, a Mr. Edward Bevan, Analyst to the Middlesex County Council, had the temerity to inform the Magistrate that his experience had been that the heat or dryness of the weather did not affect the amount of fat in milk, but that he made allowances for water according to the season. Everyone, I suppose, knows that the fat is the cream, and here Mr. Plowden, the Magistrate, brought his common sense to bear upon the case, and said it seemed to him that where milk was poor, it affected not only the water and the solids, but also the cream, and he dismissed the case; and I think the sooner the Middlesex County Council dismisses their Analyst the better, for it is certain that he is merely a faddist, and might cause great injustice to be done if his evidence were relied on, but fortunately in this case his shallow reasoning was too transparent.

Yours, &c.,

C. M. M.

London, Sept. 25th

This is a striking instance of the pernicious effects of Mr. Plowden's ignorance. The malice of the suggestion that because Mr. Plowden is incapable of understanding a scientific question the Middlesex County Council should dismiss its analyst is apparent enough, and will doubtless be treated with merited contempt.

HAVE YOU FALLEN BY THE WAYSIDE?—Advertisements are never watched more carefully than in these dubious times. Perpetual advertising is a sign of financial strength. Spasmodic advertising signifies weakness. You might as well take down your sign and tell people that you are out of business if you intend to drop your advertisement now. "Fallen by the wayside" will your competitors say or make believe. "They are not any more in business, their advertisements have been dropped." You do not want any such talk to go around.

A SENSIBLE ANSWER.—Jones: Good morning, Benson. How do you find business? Benson: By judicious advertising.

CO-OPERATION IN PRACTICE.

At Caerphilly, on September 23rd, Superintendent Jones summoned William Fleet, the manager of the Caerphilly Co-operative Stores, for selling an article which on being analysed, was found to contain 50 per cent. of coffee, and 50 per cent. of chicory. The article sold in this case was Lewis's dandelion coffee, but the analysis proved that there was no dandelion in the sample. Defendant was fined £1 4s. 6d., including costs, and the Secretary of the Co-operative Society was ordered to pay the cost of a summons which had been taken out against him in the case.

TEN PER CENT. STARCH IN PEPPER.

THE WHOLESALE DEALER TO BE SURE FOR DAMAGES.

At West Bromwich, on September 28th, John Berry, grocer, Moor-street, West Bromwich, was summoned for selling adulterated pepper on the 17th ult. Mr. Morris stated that two ounces of pepper were purchased by an Inspector from the defendant's shop, which, upon analysis by the Borough Analyst, Mr. John White, F.I.C., was found to be common pepper adulterated with 10 per cent. of rice starch. He produced an invoice for the pepper from Mr. John Kenderdine, of Gough-road, Edgbaston, where the defendant purchased it from. He pointed out that Mr. Kenderdine tried to get out of the responsibility by giving no guarantee with the pepper. He could not bring any action against Mr. Kenderdine unless a conviction was made, and then they would support the defendant in bringing an action in the County Court against the dealers. The Magistrate's Clerk thought as it was a sale the wholesale dealers were liable. Mr. Field (Magistrate) said in his opinion Mr. Berry had been imposed upon in a cruel manner. In order to give the defendant an opportunity of bringing an action against Mr. Kenderdine the Bench fined him 6d. and costs, in all £1 5s.

ACETIC ACID AS VINEGAR.

At Burslem, on September 17th, William Barnett, who keeps a fried fish shop in Enoch-street, Burslem, was summoned for selling adulterated vinegar. Mr. Fisher prosecuted. The evidence for the prosecution was, that on August 23rd, Mr. Knight's assistant went to the defendant's shop, and asked for some vinegar. The man replied that he did not sell vinegar, but afterwards sold a pint. A portion of this was examined, and found to contain sixty per cent. of acetic acid. The defendant pleaded that he did not sell vinegar; he only used it for the fried fish. He was ordered to pay the costs.

MILKMEN: DON'T BRIBE!

It is believed by many milkmen that it is good policy to bribe the Inspector. This belief has got three doubtless estimable gentlemen into trouble in Dublin. In the Southern Division of the Police-court, on the 28th September, before Mr. Swift, Mr. Patrick Devitt was charged with having, in conjunction with two other men, attempted to bribe Food Inspector Lyons, on the 26th of August last, by giving him a £1 note to induce him to desist in carrying on a prosecution against Mr. Loughlin Farrell, of Meath-street, for having sold milk adulterated with water. From the evidence it appeared that the £1 was contained in a letter written by a man named Sullivan and delivered by a man named Douglas, who, it was alleged, got it from Devitt. Mr. Philip White (instructed by Mr. M'Sheehy) prosecuted. Dr. J. B. Falconer (instructed by Mr. John White) defended. The case against Sullivan was before the Court on a former occasion, and Sullivan was returned for trial to the Commission. His Worship now returned Devitt for trial, admitting him to bail.

HE UNDERTOOK TO BURY IT, BUT SOLD IT AS PORK.

At Newbury Borough Police-court last week, a butcher, named Edmund Fisher, pleaded guilty to sending a suspicious animal to Newbury Market on the 14th ult. The facts were that defendant was asked to see two pigs belonging to William Ball, and he informed Ball that one of them had the fever very badly. He undertook to kill the animal and bury it, but it was afterwards ascertained that he had sold portions of the pig as pork. He bought the other pig from Ball for 30s., and sold it on the Thursday in the Market for 55s. The Bench imposed a fine of £5, and 18s. costs.

£10 FOR BEEF BITS.

At Dublin, on September 28th, James Nelson, 171, Great Britain-street (trading as the "Colonial Meat Company"), was prosecuted at the suit of Inspector Halligan, for selling on the 9th ult. to a boy aged ten years, named Patrick Brennan, Capel-street, 1 lb. of beef bits, which were unsound and unfit for human food. Sir Charles Cameron was examined, and proved the meat to be unsound. His Worship imposed a fine of £10.

HE DID NOT UNDERSTAND COFFEE.

At Rivenhall, Essex, George Cutts, a grocer, was charged with having sold coffee adulterated with 45 per cent. of chicory. Police-superintendent Gillis deposed to visiting the defendant's shop and asking for half-a-pound of coffee. Defendant had only 7 ozs. left, and witness bought them for 7d. The Public Analyst had certified that the coffee contained 45 per cent. of chicory. Defendant said he did not understand coffee. He did not know there was any chicory in it; he had not mixed it. He handed in some papers marked "Chicory and coffee," in which he sold his coffee. He was fined 2s. 6d., and the reduced costs, 3s. 6d.

VINEGAR.

At Clay Cross, on September 20th, Sarah Hardy, grocer, of Danes-moor-road, was summoned for having sold a pint of vinegar which was found to consist of acetic acid adulterated with sulphuric acid and water. The case was proved by Colonel Shortt, Inspector of Weights and Measures, and his assistant, Robert Tomlinson, who purchased the vinegar. Fined £1 2s. 6d., including costs.

HUMPH!!!

At Marylebone, on September 30th, Thomas Noad, farmer, of Blackbird-hill Farm, Neasden, appeared to answer to two summonses, taken out by Inspector Watts, for the Central Division of Middlesex, for selling new milk which was alleged to be adulterated with 10 per cent. of added water. Mr. Colam, barrister, defended. Mr. Colam, in defence, urged that this milk was really not adulterated. The water found in it was due to natural causes, owing to the poverty of the feeding, the fields having been scorched up by the hot weather. The defendant was called, and stated that he owned 65 cows. Samples had been taken scores of times of his milk, but no complaint had been made about the quality. The milk in question was part of the evening's milking. He superintended the operation, and saw the whole of the milk put into the churns. There was no water added to the milk. He believed that his land was more burnt up than any farm in Middlesex. His cows improved in the quality of the milk they yielded after feeding them artificially. William Harman, the distributor of the milk, and Thomas Hart, the defendant's manager, both swore that no water had been put into the milk. Mr. Cook said that the depreciation in the quality of the milk might be accounted for, first of all, by the extremely hot weather, and, secondly, by the barrenness of the fields upon which the cows fed. It had been undoubtedly a most extraordinary season for the great heat and want of herbage, and allowance ought to be made to farmers and dealers. These samples were taken in the hottest time of the year, when any one could see that the soil was absolutely burnt up. The sterility was, no doubt, the cause of the milk not being of good substance, and he should therefore dismiss the summons. The other summons was not entered into, but was dismissed on the same grounds. Costs were asked for, but refused.

WHAT IS VINEGAR?

At Merthyr Police-court, on September 25th, a summons against James King Price, a grocer at Dowlais, was heard, charging him with selling vinegar which was adulterated. Mr. Beddoe appeared for the prosecution, and Mr. A. C. Champney, of Gloucester, defended. Police-sergeant Salter deposed to buying the vinegar at Mr. Price's shop on the 15th of August. Dr. Morgan, the Public Analyst, stated that he had analysed this sample, and found it to contain 30 per cent. of pure malt vinegar, and 70 per cent. of other than pure vinegar, which he had put down as pyroligneous acid. In a long cross-examination, witness stated that in his opinion, vinegar should be malt vinegar, and that he would reject any other. He was not aware that vinegar was manufactured from articles other than malt. He said that there was nothing deleterious in this vinegar. For the defence, it was contended that this vinegar was the vinegar usually manufactured and sold in this country—that it was manufactured by Messrs. Stephens, Sons and Co., of Gloucester. Mr. George Embrey, the Public Analyst for the county of Gloucester, was called, and stated that he did not agree with Dr. Morgan that vinegar, to be true, must be manufactured from pure malt, and that that was the general opinion of the public. He had analysed a portion of a sample sent to him, and had sent part of it to Mr. Hehner. He found no trace of pyroligneous acid in it. He found that it was a sample of pure vinegar. If the sample had been submitted to him as a sample of malt vinegar he would have said it was adulterated. Mr. Otto Hehner, corroborated the last witness. In his opinion vinegar was "a vegetable juice or infusion which had passed through alcoholic acetic fermentation," and that was the definition usually accepted. This vinegar came within that definition. It was an article of genuine brewed vinegar. The Stipendiary stated that it was not alleged that this vinegar was unwholesome. It was a question of whether all vinegar should be brewed from malt. Dr. Morgan said "yes," and referred to the "Pharmacopœa," but they preferred accepting Mr. Hehner's definition, and this vinegar clearly came within that definition. The summons was dismissed.

30 PER CENT. FLOUR AND TURMERIC IN MUSTARD.

At Merthyr, on September 25th, John Thomas, a grocer, residing at Dowlais, was summoned for selling mustard which was adulterated. Mr. Beddoe prosecuted and Mr. D. W. Jones defended. Police-sergeant Salter deposed to buying the mustard. The Analyst's certificate showed that the sample contained 70 per cent. pure mustard and 30 per cent. flour and turmeric. In answer to Mr. Jones, witness admitted that when he purchased the mustard he read the labels on the tins, which was to the effect that the tins contained mustard condiment. It was contended that no offence had been committed, as witness did not ask for pure mustard, and knew at the time what he was getting. The Bench said that it was well known that the mustard in commerce was not pure mustard, but was usually mixed in order to give it a flavour. Having regard to that, and the statements on the labels, the summons would be dismissed.

NINETEEN PER CENT. EXCESS WATER IN WHISKY.

At Coventry City Police-court, on September 21st, William Moore Walker, landlord of the Buck and Crown Inn, Radford, was summoned for selling Irish whisky adulterated with water on the 23rd of August last. Defendant pleaded guilty. The Town Clerk said the Inspector purchased some Irish whisky on his own account, and afterwards more for the purpose of analysis, which proved to be adulterated 19 per cent. more than was allowed by the Act. Defendant explained that he and his wife went out on the day in question and left their granddaughter in charge, and she, it appears, put some water in the jar. When he returned he was told what had occurred, and he rectified the mistake. The Bench inflicted a fine of 40s., and 11s. 6d. costs.

LARD AND SOMERSET HOUSE.

At Steyning Petty Sessions, on the 26th ult., Messrs. Kearly and Tonge, trading as the International Tea Company, at High-street, Shoreham, were summoned for selling adulterated lard on the 31st day of July at Shoreham. Superintendent Byrne said he was Inspector under the Food and Drugs Act. On the 31st of July he entered the defendant's premises at New Shoreham and asked the manager for three-quarters of a pound of some lard which was on the counter. Having completed the purchase, he told the manager that he had bought it for the purpose of having it analysed by the Public Analyst. He had received the Analyst's report. It stated that the sample was adulterated with at least 5 per cent. of beef fat. Since the service of the summons he had received a letter (produced) from Messrs. Wilkinson and Co., solicitors, which gave notice that in addition to other defences they would rely upon the defence that the lard was sold in the same state as it was bought, with a warranty as to its purity. Mr. Ernest J. Wilkinson said he appeared for the defendants. One of his points would be that the summons was not taken out in time according to the Act of Parliament. The Sale of Food and Drugs (Amendment) Act provided that in the case of a perishable article the summons must be taken out within a reasonable time, and in any case within twenty-eight days. Mr. G. A. Flowers (Magistrate's Clerk): You cannot call this a perishable article. Mr. Wilkinson: It deteriorates when the skin is broken. I say the summons has not been taken out in time. Mr. Flowers: In the case of a perishable article. Mr. Wilkinson: Precisely so. I say, too, that lard is a perishable article when the skin is broken. Mr. Flowers: I must advise the Bench that lard is not a perishable article. Mr. Wyatt said the Bench were of opinion that lard was not a perishable article within the meaning of the Act. Mr. Wilkinson said that under another section of the Act the third sample, now in Superintendent Byrne's hands, could be sent to Somerset House, and he would apply that that might be done, and that the case should be adjourned until a reply had been received from the authorities there. This the Bench agreed to, and the case was adjourned.

ANOTHER ERROR IN PROCEDURE.

At Arundel County Bench, on September 25th, Frank Elliott, grocer, Littlehampton, was summoned for selling adulterated lard on the 4th August. Police-sergeant Cross deposed to purchasing at defendant's shop three-quarters of a pound of lard, for which he gave 8d. Defendant: Sixpence, Sergeant. Witness, continuing, said he told defendant he had bought it for analysis. Superintendent Kennett said he received a sample of the lard from Sergeant Cross, and sent it to the Analyst, who had certified it to be adulterated with 3 per cent. of beef fat. Mr. G. H. King, of Portsmouth, who appeared for the defendant, raised a technical objection, contending that the Sergeant should have told the vendor he was going to have the lard analysed by a "Public" Analyst. He quoted the case *Barnes v. Chip* in support of the contention. Superintendent Kennett pointed out that the officer in offering to divide the lard stated that one part would be submitted to the Public Analyst. Mr. King: That was an offer not accepted by the defendant. The Chairman: Would you like the Sergeant to get in the box again? Mr. King: Oh, no; never again (laughter). The Magistrates supported the objection, and dismissed the case.

MAIDSTONE DAIRY FARMERS AND MILKMEN
TAKE A SENSIBLE STEP.

At a meeting of milk producers and farmers at the Mitre Hotel, Gravesend, Mr. J. Brann (Dunstable farm) being in the chair, it was resolved that a Milk Suppliers' and Farmers' Association be formed, it being considered advisable that all in these businesses should combine together to watch the interests of farming and dairy work. It was agreed by the committee appointed by the new association, that in consequence of the extremely high prices of hay, straw, roots, and other fodders required for cattle, "it is now absolutely necessary (to prevent ruin to all milk producers) that the price of milk be raised to 5d. per quart to the consumers, the price to commence on September 29th, 1893, and continue until further notice, and that a circular be issued by the association to this effect." It was stated that no class of men have suffered so much by the great drought, as farmers and dairymen, and that the prospects of the coming winter are so exceptionally depressing to agriculturists, that it must as the winter proceeds also be severely felt by the general public—that, in fact, the depression in agriculture must be very serious for all.

5s. FINE FOR 5 PER CENT. EXCESS WATER.

At Caerphilly Petty Sessions, on September 23rd, Superintendent Jones summoned Mr. Williams, landlord of the Globe Inn, Caerphilly, for selling adulterated whisky. Mr. James Phillips, solicitor, Pontypridd, defended. The evidence was to the effect that the whisky when analysed was found to be composed of 33.29 alcohol and 66.71 added water, or, in other words, the whisky was 30 per cent. under proof. Superintendent Jones stated that there was no notice to be seen in the room—had it been there he would have seen it. It was alleged by the defendant that the notice produced was hanging on the wall, and evidence to this effect was called. A fine of 5s. was inflicted, the Bench stating that such notices were not of any good unless there was one placed in a prominent position in each room.

A WISE FLY.—The Industry Enterprise says that a farmer living near that place was much surprised upon opening his paper to find a spider therein. As he was very superstitious, he thought it a bad omen, but finally decided that the spider was looking to see what he advertised, so he could go to the stores of those who did not advertise and spin his web where he would not be disturbed.

GRATEFUL AND COMFORTING FOR SAUSAGE USERS.

A new brand of sausage made from horseflesh, will soon be placed on the market by a maker, whose business heretofore has been to extract oil from fish and sell the scraps for fertilizing purposes, who has conceived this brilliant idea. No one, therefore, can question the statement that fish is a "brain producer." The maker says the demand for sausage in Europe is greater than the supply, and no attention is given to their composition. He is buying up worn-out and decrepit horses, and has already quite a supply. He proposes to kill cheap cows, bulls, and other animals, and to mix the meats with horseflesh, and make a sausage that will keep two years.

HE WAS TOO RESPECTABLE TO WATER HIS WHISKY, SO HIS WIFE PUT IN 23 PER CENT. EXTRA.

At the Coventry Police-court, on September 28th, Arthur Ward, landlord of the Grapes Inn, R dford, was summoned for selling adulterated whisky. The Town Clerk prosecuted, and Mr. M. Wilks appeared for the defendant, who pleaded guilty. Mr. Beard said the Act allowed whisky to be diluted 25 per cent. under proof, but whisky purchased on August 23rd by the Inspector, was reported by Dr. Bostock Hill to be diluted 23 per cent. below the standard allowed. Mr. Wilks said the adulteration was due to an accident. On August 23rd, defendant diluted the whisky as allowed by law, and later in the day his wife, not knowing that the water had been added, placed almost a similar quantity of water in it. He ridiculed the idea that whisky would be wilfully adulterated by such a respectable man as defendant to the amount stated. The Bench said they could not inflict a fine of less than 40s. and costs. Mr. Beard asked for the Analyst's fee, which was allowed, and the total fine and costs was £3 13s. 6d.

MORE WATER BECAUSE TRADE IS QUIET.

At the Castle Eden Petty Sessions, Wm. Park, landlord of the Dun Cow, was summoned under the Food and Drugs Act for having sold a pint of adulterated whisky on the 27th July. It was 8 per cent. weaker than the 25 per cent. allowed by the law. Water had been added. The defendant admitted the offence, and he was fined 15s. and 7s. costs.—Joseph Youll, of Thornley, was charged with having sold adulterated rum. There was 15 per cent. of water in excess—a total of 40 per cent. of water. The defendant said the trade was in a quiet condition. Mr. W. H. Fisher: So you put more water in, eh? Defendant: No, I don't mean that; but I can't make any better of it now. Fined 20s. and costs.—Simpson Swinburn, landlord of the Robin Hood Inn, Thornley, was charged with selling a pint of adulterated rum. The Analyst's report showed in this case an excess of 9 per cent. of water. The defendant pleaded that he was not aware of the adulteration, and it must have been caused by a defective tap. Fined 20s. and 7s. costs.

ADULTERATED BUTTER AND COFFEE IN WOLVERHAMPTON.

George Smith, of 535, Dudley-road, Wolverhampton, was charged at the Wolverhampton Police-court on September 8th, before Mr. N. C. A. Neville, Stipendiary, with selling as butter a substance which was not of the nature and quality demanded, with exposing margarine without a proper label, selling a parcel of margarine without it being properly labelled, and with selling as coffee an article which was not of the substance and nature demanded. Mr. H. Taylor defended. Mr. G. F. Allwood, Inspector under the Food and Drugs Act, stated that on July 29th he sent a girl named Emily Cash into the shop of the defendant, who was a grocer. The girl asked for half-a-pound of shilling butter, and was supplied with it in a plain wrapper. She further asked for a quarter of a pound of coffee, and, on being supplied, paid fourpence for it. He (Mr. Allwood) submitted the articles to the Public Analyst, and received certificates stating that one was margarine, and contained only the slightest trace of real butter, and that the coffee was adulterated with 63 per cent. of chicory. Mr. Taylor, for the defence, stated that although Mr. Allwood had described the defendant as a grocer, Smith was not a grocer at all, and had never been one. He had been in regular employment at Clark's Foundry, and in the evening was limeight man at the Star Theatre. The grocery business, which was a small one, belonging to, and was managed by, the defendant's wife, who had purchased it as a going concern. Part of the stock consisted of a small quantity of coffee in a tin which Mrs. Smith sold in pennyworths, mixed with sugar, to factory girls. Mrs. Smith had purchased a quantity of butter and margarine, which were placed side by side in the shop. Mrs. Smith had been ill before the margarine and coffee in this case was purchased, and a woman named Catherine Woodward, who had been engaged to clean the shop, had accidentally put the margarine label on that of the butter, as both looked the same. After hearing the evidence on both sides, Mr. Neville said he did not believe Mrs. Smith carried on the business separately from her husband, as the latter was rated for the house, and resided there. The defendant had rendered himself liable to fines amounting to £80, and if in small grocers' shops the shopkeeper did not sell what they were asked for the fines would have to be so heavy as to make them clear out. People who sold groceries must be honest. The cases of selling margarine without a proper wrapper, and adulterated coffee only would be dealt with, and the defendant would be fined £3 and costs in the first case, and 20s. and costs in the second. The fines and costs amounted to £2 4s.

OBITUARY.

The death has occurred of Mr. C. W. Heaton, Professor of Chemistry in Charing-cross Hospital, W.C. Mr. Heaton was Examiner in Chemistry to the Royal College of Physicians, and to the Royal College of Veterinary Surgeons, was Treasurer to the Society of Public Analysts, and filled the office of Public Analyst to the parish of St. Martin-in-the-Fields.

THE DANGERS OF IMPORTED MILK.

In connection with the increase of diphtheria in London, a correspondent of *The Times*, draws attention to a question that has often been dealt with in our columns. He says:—

"Can this have anything to do with the very large imports of milk from Holland and elsewhere which are daily taking place? Dutch dairies are notoriously ill-kept, and the cattle drink at any dirty puddle. It would be well if everyone would make strict inquiry as to the source of their supplies. Dutch dairies are, further, subject to no public inspection, whereas our home dairies are liable to inspection at any hour. If it is necessary to ward off epidemic by inspecting the latter, is it not also necessary for the Local Government Board to take some steps with regard to produce coming from the former? But the authorities are powerless as regards this imported milk. So the individual consumer ought to be warned."

The Times correspondent might have adduced another very grave objection to the use of imported milk, viz., that it is all drugged with preservatives, which cannot act otherwise than injuriously upon those consuming it, and that none of the countries that send us this drugged milk, would allow such milk to be sold for consumption to their own people. The fact that they can thrust drugged and dangerous articles of food upon the English people with impunity, the sale of which in their own countries would involve heavy penalties, is a matter that ought to engage the attention of the Agricultural Commission, but that it will do so, is more than can be hoped for, as not one member of it is an expert on adulteration, or is able to realise how colossal a part Foreign Free Fraud is playing in ruining English industries.

GIN 40 UNDER PROOF.

At Kilmersdon Petty Sessions last week, Farnham Brimble, licensee of the Tynning Inn, Radstock, who was represented by his wife, was summoned for selling gin 40 de rees under proof, and which was not of the substance, nature, and quality of the article demanded. Police-constable Cross stated that on August 28th he went into the Tynning Inn with a woman, who bought and paid for a pint of gin. Afterwards he told the landlord he had employed the woman to purchase the gin, and divided it into three portions, which were sealed. Superintendent Williams produced the certificate of the Analyst, which showed that the spirit was 40 degrees under proof, five below the minimum allowed by the Act. The Bench imposed a fine of £1 and costs.

THE "NOTICE" DODGE.

On the 28th ult., at West Bromwich Borough Police-court, before Messrs. J. Field, J. Bywater, J. Manley, and D. Howard, Henry Mountain, landlord of the Hare and Hounds Inn, Five Ways, West Bromwich, was summoned by Mr. J. E. Morris, Inspector under the Sale of Food and Drugs Act, for selling adulterated rum on the 7th ult. Mr. J. Clark appeared for the defence. Mr. Morris stated that on the day named one of his assistants purchased half a pint of rum at defendant's house, for which 1s. 2d. was paid. That was the outside price paid in the district for rum of good quality. Upon going into the kitchen his assistant saw a notice setting forth that the spirits sold there were reduced in strength according to the price. William Gressam, assistant to Mr. Morris, said that from the place where he bought the rum he could not see the notice. Mr. Morris said the sample had been analysed by the Borough Analyst, Mr. John White, F.I.C., and his report showed that it was adulterated with 12 per cent. of water in addition to the amount allowed by Act of Parliament. Mr. Clark urged that the defendant, having exhibited in a very conspicuous part of the room where the rum was sold, the notice referred to, was protected from the penalties under the Act of Parliament. He quoted cases in support of this contention. In one case it was held that, if a notice was exhibited that the article sold was mixed or diluted, the vendor was exempt from penalties. Mr. Morris contended that the notice was not brought under the observation of the purchaser. Mr. Clark said it was exhibited in a prominent place, and in striking colours, and the notice made it plain that all spirits were diluted to a certain extent. Defendant was fined 30s. 6d., including costs.

50 PER CENT. CHICORY IN COFFEE.

At Skipton Petty Sessions, on September 23rd, Hannah Davy, grocer, Farnhill, was summoned by Mr. A. Randerson, Inspector of Food and Drugs, who said that on the 20th ult. he visited defendant's shop and purchased half-a-pound of coffee. The daughter served him, and then the mother seeing him said it was not coffee, but chicory and coffee mixed. He told her what he required the coffee for, and she refused to have it divided into three parts. He sent it to the Analyst on the 19th ult., and his report showed that there was 50 per cent. coffee and 50 per cent. chicory. Defendant was fined £2 and costs £1 2s. 8d.

THESE WERE NOT LLOYD'S EIGHT PER CENT. WATER COWS.

At Nantwich Petty Sessions, last week, Wm. Crawford was charged with selling milk adulterated with 8 per cent. of added water. Mr. Albert Timmis, Inspector under the Food and Drugs Act for the County of Chester, said he presented a jug to defendant, and purchased a quart of milk. He divided the milk into three parts, one of which he gave to defendant, keeping one himself, and sending the other to the County Analyst at Manchester. The report was that it contained 8 per cent. of water. A few days after he went into the field in which defendant's cows were, and took a sample, which had been declared by the Analyst to be pure. Fined £1 including costs.

WORKING UP THE MILK SWINDLE. THE SOMERSET HOUSE WHITEWASHING.

Commenting upon the game to whitewash Somerset House, the *Sheffield Independent*, September 24th, says:—

"Does the Cheshire Farmers' Club fondly imagine that the authorities at Somerset House will consent to reduce the minimum standard of specific gravity below which milk may not be sold? If they did that they would reduce all milk to the level of that produced by poorly fed cows. It would then hardly pay the honest dairyman to sell good milk. These worthy Cheshire farmers seem to have seen the obvious retort. 'You should feed your cows better,' for they add that 'in these days of agricultural depression farmers have not the capital to maintain their stock at a high standard.' It is a feeble excuse. They ought, in that case, to keep fewer cows, and then there would be enough fodder to go round. In any case the imposition upon the public is the same, whether the milk be watered directly by hand, or indirectly by keeping the cows on low diet."

It is a much more sensible and honest step to raise the price of milk to afford a fair profit than to seek to steal it by fat abstraction and water dilution.

MORE OF MR. PLOWDEN'S FOOLISH DECISION.

At Eastbourne Petty Sessions, John Berry, Langney-road, milk vendor, was summoned for selling on the 25th August, to the prejudice of the purchaser, milk not of the nature, substance, and quality demanded, the said milk being adulterated with 10 per cent. of added water. Sanitary Inspector Ollett said that on the morning in question he saw a milk perambulator with the defendant's name on it in Ashford-road. He asked the lad in charge of it for some new milk, but the lad said he had none. The defendant then came up with another perambulator, and witness said, "I want a pint and a half of new milk; your lad has sold out." Defendant gave him the milk and he paid for it, and having paid for it said that he had purchased it for the purpose of having it analysed by the Public Analyst. Defendant said that he knew that, and helped witness to divide the milk into three parts. Cross-examined, witness said that he had known the defendant for some time as a respectable tradesman and was very much surprised at the result of the certificate. When he shewed the defendant the result of the analysis, he said he believed the milk from the wholesale people was adulterated. Witness took three samples of milk from three wholesale people with whom the defendant dealt, and found one of them adulterated to the extent of 20 per cent. The certificate of the Analyst was put in, and Mr. Lewis urged that if the milk was adulterated it was done by one of the wholesale people, and not by the defendant, whose conduct, as Mr. Ollett had said, showed that he was totally unaware that the milk was adulterated. But was it adulterated? A case had recently been heard by Mr. Plowden, in which the milk was alleged to have been adulterated to the extent of 7 or 8 per cent., but it was given in evidence that the milk was very poor, and that this accounted for the appearance of adulteration. The defendant gave evidence. He said that he had never added any water to the milk. He received milk from three wholesale dealers, but, during the past three weeks he had been so busy that he had not time to test the milk before going out with it. After Mr. Ollett took the sample he tested the milk when he got home and found it wrong. Had he tested it before he started he should not have sold it. The Chairman said that the defendant by his own admissions came within the Act. Mr. Lewis said that if the defendant had given himself away he thought it must be admitted that he had given his evidence with remarkable fairness. The Chairman said that the law threw on the retail vendor the responsibility of seeing that he had the right article. Defendant would be fined £1, including costs.

ADULTERATED MILK FOR HOSPITAL PATIENTS.

At Liverpool, on September 27th, before Mr. W. J. Stewart, Stipendiary, Thomas H. Bosworth, milkdealer, 20 and 22, Lance-street, was summoned for supplying adulterated milk to the Netherfield-road Hospital. Inspector Webster, stated that on Friday, the 1st ult., he visited the Netherfield-road Hospital, and there saw the defendant delivering milk. Witness took a sample, and divided it into three parts. On analysis being made, it was found that ten parts of water had been added to every one hundred parts of milk. The contract with the hospital was that defendant should supply new milk. Mr. Pierce, who prosecuted, said the Corporation did not wish to unduly press the case, as they were of opinion that defendant was merely a tool in the hand of another person. Mr. Stewart asked if the prosecution intended to go beyond that case. Mr. Pierce replied in the negative. Inspector Baker here stated that defendant was known to have been supplied with milk by a person who had been convicted on five occasions for milk adulteration. Mr. Stewart, taking into consideration all the circumstances of the case, imposed a nominal fine of 5s. and costs.

RIDICULOUS FINES AT SALFORD.

At Salford Borough Court, on September 29th, John Taylor, dairyman, 213, Oldfield-road, was fined 15s. and costs, for selling milk adulterated with water. Inspector Rider, who proved the offence, which was committed on the 22nd August, said the milk was certified to contain nine per cent. of added water. George Mills, confectioner, &c., 178, Oldfield-road, was fined 10s. and costs for selling milk containing 25 per cent. of added water. Mr. A. Holmes, Deputy Town Clerk, appeared in support of the summonses.

William Hermon, of Milson-road, West Kensington-park, was fined 20s., with 12s. 6d. costs, at West London Police-court, on September 21st, for exposing margarine for sale without a label.

SUPPRESSING ADULTERATION IN SWINDON.

Mr. James Ward, Food and Drugs Act Inspector to the Wilts County Council, is doing splendid service in protecting the public and honest farmers from fraud. Thursday, September 28th, was a milkman's field-day, the first gentleman introduced to the Magistrates by Mr. Ward being

William John Frost, milkseller, of Cromwell-street, New Swindon, for selling milk adulterated with 17 per cent. of added water. Mr. H. Bevir prosecuted on behalf of the County Council. Mr. Ward said that on Sunday, September 3rd, his son purchased a quantity of milk at defendant's shop. Witness sent a portion to the Public Analyst, whose report was to the effect that the sample contained 17 per cent. of added water. Cross-examined: Witness had since taken from Messrs. Cox and Hall, the people from whom defendant said he obtained the milk, a sample which had been pronounced genuine.

Mr. J. W. Ward, son of the Inspector, spoke to purchasing the milk from the defendant, who took it from a can on the counter. Defendant elected to be sworn. He said he received the milk in a churn from Messrs. Cox and Hall the same morning, and sold it as he received it. He wished to say that Messrs. Cox and Hall, upon whom he wished to cast no reflection, contracted for milk from different farms. Rose Frost, defendant's wife, also gave evidence. The Bench reserved their decision until the other cases were heard. William Frost, of Bridge-street, New Swindon, father of the last defendant, next appeared on a summons arising out of the same case. Mr. Ward said that after he took the sample, defendant met him in the street, and said the milk belonged to him, as it was his business, and his son managed it for him. Following Mr. Frost came William Henry Franklin, of the Star Dairy, Regent-street, New Swindon, summoned for selling milk having 5 per cent. of added water. Mr. Lloyd's watering case was again brought forward by Mr. A. E. Withy, of Bath, who defended. Mr. Bevir stated that the Analyst added to his report this observation: "If this milk be the produce of one or two badly-kept and ill-fed cows it is possible that its general poorness may be due to these conditions." It should be said, Mr. Bevir added, that Mr. Ward had inspected the herd from which the milk was obtained, and their appearance negated the suggestion in the report. The Inspector stated that after he had received the Analyst's statement, defendant visited him, and said he could not account for the presence of the water. He stated that he bought his milk from Mr. Phillips, of Studley Farm. On September 17th witness took a sample from Mr. Phillip's man at defendant's shop. Mr. Withy objected to Mr. Ward giving the result, and Mr. Bevir did not press it. On September 18th, continued Mr. Ward, he visited Mr. Phillips' farm and saw the herd, which numbered about 30 cows. Cross-examined, the Inspector said he had taken samples of defendant's milk previously, and had always found it genuine. He had had a cow milked in his presence, and the milk analysed, and it contained 5 per cent. of water. He should be very much surprised to hear that 7½ per cent. had been found under similar conditions. Arthur Doel, the Inspector's assistant, having spoken to purchasing the milk, Harry Phillips, of Studley Farm, said the milk which he supplied defendant was taken from the herd of 30 cows. Mr. Withy, in defence, said Mr. Franklin had several times protected himself by having analyses taken. In two cases the Analyst said the milk was perfectly pure, while in a third instance there was 5 per cent. of so-called added water, and the Analyst referred to it in almost the same terms as in the present instance. He (Mr. Withy) submitted that the arbitrary tables laid down were not a satisfactory guide. The excessively dry summer was, he contended, quite sufficient to explain the 5 per cent. of alleged added water. Mr. Withy called George Watson, labourer, in the employ of Mr. Phillips, who said he assisted in the milking, saw the milk put into the churns, and took them to Swindon. No one could have put water into the milk, nor did he tamper with it himself. Cross-examined: The cows were in very good condition. Defendant said when he received the milk he put part of it into buckets and sent his brother his rounds, while the rest went into a churn. George Franklin, defendant's brother, said the buckets into which the milk was put were clean and dry. When he met Mr. Ward there were between two and three quarts left; he had 4½ gallons at the start. Neither he nor any one else put water into the milk. The Bench after consultation, decided that they had no alternative but to convict. The Bench next took the case of Henry Bennett, of Princes-street, New Swindon, who was summoned for a similar offence. Mr. Ward said the milk was purchased from defendant's son, and was reported to contain 12 per cent. of added water. Mr. Withy, for the defence, said that after the decision of the Bench in the previous case, he felt he must submit to a conviction. He proposed, however, to prove that no water was really added, so that they might consider as to mitigating the penalty. On one subsequent occasion a sample of milk sent to the Analyst as it was taken from the cows was found to contain 10 per cent. of added water. Charles Heath, formerly in the employ of Mr. Cox, of Walcot, Arthur Balch, of Prospect Dairy, were called with the object of showing that no water could have been added to the milk on its journey from the cows to the purchasers. The Bench convicted.—Benjamin Bonfield, of Elcombe Farm, Wroughton, then followed. The Analyst's report showed that the milk contained 12 per cent. of added water. Defendant said he sold the milk as he received it. Convicted.—Frederick G. Cox, of Rodborne-road, New Swindon, represented by his mother, was summoned for selling "skimmed" milk adulterated with 18 per cent. of added water. Mr. Ward said when he asked defendant whether the milk was separated or skimmed, he replied, "You'll find that out." Witness had asked for new milk, but defendant said it was skimmed. The Analyst's report showed that the milk had not been skimmed, but had been watered to at least the extent named. The Inspector said he should

think defendant was middle-aged. Defendant's Mother: My son is 28; that's his age. Mr. Ward: Well, he is quite old enough to know what milk is. Defendant was convicted.—Frank Frost, of Gorsehill, was summoned for selling milk to which 25 per cent. of water had been added. Mr. Ward said he bought the milk from a lad named Mitchell, who was selling for defendant. The name "William Frost" was over the door of the shop, but witness did not know to whom the business belonged. Defendant said the boy had skimmed milk. When he returned he said Mr. Ward asked simply for "milk." The Bench decided to convict. On the application of Mr. Bevir a summons against William Frost arising out of this case was withdrawn. After a prolonged retirement the Bench gave their decision. The Chairman said the offences were extremely injurious, both to the consumer and the honest farmer, and the Magistrates felt they would not be doing justice unless they inflicted severe penalties in the worst cases. William John Frost would be fined £2 10s., and £1 11s. costs; William Henry Franklin, 10s. and £1 8s. 6d., 12s. costs being remitted; Henry Bennett, £1 10s., and £1 11s.; Benjamin Bensfield, £1 10s. and £1 8s.; Frederick Cox, £2 10s. and £1 8s.; Frank Frost, £3 and £1 8s. In the first case against William Frost, sen., no conviction was recorded on payment of 6s. 6d. costs.

Mr. Ward's thoroughness has filled Swindon milk and watery way gently with consternation. Immediately after the above cases, which were "Sunday milks," the dairymen raised the price of milk from 3d. to 4d. per quart. Personally, we would rather see dairymen get a legitimate profit out of an increased price than a surreptitious one by adding water or depriving milk of its cream.

MR. STEWART'S EASY FINES AGAIN.

Anthony Hogg, milkdealer, 27, Walker-street, Liverpool, was summoned on September 27th, for refusing to serve an Inspector under the Sale of Food and Drugs Act. Inspector Baker deposed that on the 15th ult. he saw the defendant with his milk shandry in Prospect-street. He was measuring milk out of a large can into several small cans, and gave them to his boy to deliver. Witness asked him for a pennyworth of new milk, whereupon defendant lifted the lid of a small can and was in the act of emptying its contents into the large can when witness stopped him, told him he was an Inspector under the Sale of Food and Drugs Act, and demanded a sample from each can. Defendant supplied him out of the smaller can, but took four quarts from the large one and gave it to his boy. Witness told him that if he served all the milk before giving him a sample, he would summon him for refusing to sell. He then handed him his jug, and Hogg placed it on the seat of the shandry. He then lifted up the can, but instead of pouring it into the jug he allowed it to flow off the vehicle. Witness drew his attention to the fact, and was about to secure a sample, when defendant gave the can a sudden turn and again allowed the contents to pour on to the floor. Witness then informed him that he would summon him. Defendant replied, "I am very sorry, Mr. Baker, and beg your pardon." Mr. Pierce announced that Hogg had been fined 10s. and costs in 1891, and £10 and costs in 1892 for adulteration, and 20s. and costs in March of the present year for refusing to sell milk. Mr. Stewart inflicted a fine of 40s. and costs.

ISLINGTON INSPECTORS' SEIZE MORE UNSOUND FOOD.

At Clerkenwell, on September 27th, George Briginshaw, of 166, Essex-road, was summoned by the Islington Vestry for exposing for sale, on September 9th, cheeses, a cooked ham, bacon, butter, rabbits, and cooked fowls, which were unsound and unfit for the food of man. Mr. Horace Smith said he must protect the public health, and fined the defendant £5, with 12s. 6d. costs.

£3 12s. 6d. FOR PUTRID AND MAGGOTTY MEAT.

Richard Blink, butcher, of 49, St. Peter's-street, was summoned on September 27th, for exposing for sale, on September 9th, five pieces of beef and three parcels of out meat which were unfit for human consumption. Sanitary Inspector Fortune said the three pieces of meat were putrid and maggoty and were marked 4d. and 5d. a piece. Defendant denied that the meat was as bad as represented, and said some of the pieces seized were perfectly good. The magistrate inflicted a fine of £3, and 12s. 6d. costs.

INSPECTORS SHOULD NOTE THIS?

Solomon Lyons, of 110, Seven Sisters'-road, was summoned on September 27th, for exposing for sale, on September 7th, pears, plums, and grapes, which were diseased and unfit for human food. Mr. Howard, solicitor, took a technical objection to the summons, contending that it was bad, as the condemnation of the fruit by the magistrate did not take place until two days after the seizure. He had a good defence, however, on the merits of the case. The magistrate held the objection to be a good one, and dismissed the summons.

VERY LIGHT PENALTIES IN DUBLIN.

At Dublin Police-court, on September 28th, Mr. Daniel Kenny, 146, Upper Abbey-street, was summoned for having sold milk adulterated with 20 per cent. of water. A fine of 10s. was imposed, it being the defendant's first offence.—Frederick Flower, 41, Capel-street, was summoned for a like offence, the adulteration in this case being only 8 per cent. A fine of 10s. was imposed.—Mrs. Bridget Wade was summoned by the Corporation for having sold milk from which at least one-third of the fatty substance had been abstracted, being equivalent to 20 per cent. of added water. A fine of £2 was imposed.

True.—When the public read with respect the editorials of a journal, they then read with confidence its advertisements.

STRONG EVIDENCE AT KIDDERMINSTER.

At Kidderminster, on September 29th, Mary Ann Robins, of Sutton Farm, near Kidderminster, was charged on two summonses with selling milk not of the nature, quality and substance demanded by the purchaser. Mr. J. Morton, Town Clerk, prosecuted on behalf of the Sanitary Authorities, and the defendant, who did not appear, was represented by Mr. Corbet. Mr. Cowderoy, Sanitary Inspector, stated that on September 6th he met a man named James Meredith in the employ of the defendant, and purchased a pennyworth of new milk from him. He told the man he intended to have it analysed and then divided it into three parts, one of which he gave the milk, one he kept himself, and one he forwarded to the Borough Analyst. The Analyst's certificate showed that the milk contained 12 per cent. of added water. In the second case, another pennyworth of milk was bought from James Rollings, servant in the employ of the defendant, and divided as in the first case. The certificate of the Analyst showed that this milk contained 13 per cent. of added water. Mr. Corbet asked no questions, but contended that the defendant was not responsible for the composition of the milk if she sold it as she received it. She was only responsible if she had added anything to reduce its quality. This milk was bought from Mr. J. Giles, of Bradford House, who kept an account of all milk he sold, and who had given instructions to his men to sell the milk as it came from the cows. Mr. Giles was examined and said his cows were old milch cows. He was not surprised to find the milk he supplied to Mrs. Robins was rather poor in quality. This would be accounted for to some extent by the scarcity of grass; the cows having to be fed on cabbage-leaf keep them going. By the Town Clerk: Morning's milk was much poorer than afternoon's milk. By Mr. Corbet: None of the men had any interest in the quantity of milk sold. A labourer named Yarnall, who put the milk into the cans, said it was delivered to Mrs. Robins's man in just the same condition as it came from the cows. In answer to Mr. Corbet, the witness said there was no pump in the milking shed (laughter). Wm. Ellis, in the employment of the defendant, said the milk was not interfered with whilst in his possession. Mr. Robins received it from him and served it out to the men. Mr. Robins and his man (Meredith) were also examined, their evidence being to the effect that the milk was sold just as it was received. In the second case the milk came from Mr. Frederick Corbet's farm, and was sworn to have been sold in the same state in which it was received. After a lengthy consultation in private, the Chairman said that the Magistrates looked upon it as a very serious case in the interests of the public, who must be protected. They fined defendant £5 and costs in each case; in all £13 18s. Mr. Corbet informed the Magistrates that he should consider the advisability of appealing against their decision in the first case, as he contended that his chain of evidence regarding the milk was complete. Mr. Tempest-Radford said some of the Magistrates were favourable to a heavier penalty being inflicted, this being not the first case against the defendant. That was the unfortunate part of the business.

FINED £5, INSTEAD OF £460.

At the Police-court, Cheltenham, on September 23rd, Arthur H. Ellis, of 309, High-street, was summoned by Mr. E. T. Brydges, Town Clerk, for exposing for sale nine pigs' jowls and fourteen pigs' feet unfit for human food, on the 29th of August. Mr. H. Lewis defended. Mr. Brydges, in opening the case, said the proceedings were taken under sections 116 and 117 of the Public Health Act. The attendance of the Medical Officer of Health was drawn to the goods, and after proper inspection that officer took the meat to the police-station where it was inspected by Mr. G. M. Jackson, a Justice of the Peace, who ordered its destruction. Dr. J. Garrett, Medical Officer of Health, said that in consequence of information received, he went to 309, High-street, a provision shop; he there found a heap of pigs' jowls and feet exposed for sale. On examination he found them to be unsound. Superficially some were in a bad condition, and on being probed with a skewer others were found to be in a state of putrefaction. The meat was "unsound, unwholesome, and unfit for food for man." In witness's presence the flesh was taken to a Justice of the Peace, who ordered its destruction. Witness asked the defendant in his shop, and he said, "What could the people expect at the price they paid for them?" Mr. Lewis, for the defence, denied that the defendant had a guilty knowledge of the condition of the meat. The goods had been cured in an iced cellar, and this, having regard to the great heat of the weather during August, would accelerate putrefaction. William Higgs, in the employ of Messrs. Spiers, of Bath, spoke to despatching the meat in a sound condition to Mr. Ellis on the 23rd of August. Mr. Brydges: How long does it take to generate maggots? (Laughter.) Witness: A few hours. After some deliberation the Bench said the offence was a serious one. Taking the Act as it stood defendant was liable to a fine of £460. As this was his first offence, however, he would be fined £5 and costs.

At Doncaster, on September 23rd, Thomas Strutt, innkeeper, Conisbro', was charged with having sold gin 39 degrees under proof. Mr. J. Wilson, Inspector of Weights and Measures, appeared in support of the summons. The law allows the sale of gin 35 degrees under proof. The defendant said he had been an innkeeper for 40 years, and this was the first time he had been summoned. There was nothing said, apparently, about the whisky being that was eight degrees stronger than he ought to sell it. (Laughter.) He regretted that the gin had been weakened; it had been sold to him that it was so. The Chairman: No doubt what you have done was a fraud on your customers, but, as there was no intention in the liquor, you will be let off on paying £1 10s. and costs.

SPECIAL OFFER TO THE TRADE ONLY.

119, CANNON STREET & 13, SHERBORNE LANE,

LONDON, E.C., *October, 1893.*

COCKBURN'S PORT

IMPORTANT PURCHASE

OF

9,521 DOZS.

OF

COCKBURN'S OLD BOTTLED PORT

(In Bottles and Half-Bottles)

BY

**J. TRAVERS & SONS,
LIMITED,**

Who will be pleased to send Full
Particulars on application.

A CURIOUS WHISKY CASE.

Of queer defences there is no end. With respect to the following one we cannot see why a special preparation was made up for the patient instead of the whisky being drawn and watered as needed. The defendant, however, is likely to be more careful in future. Charles Bailey, of the Forest Home, Hardley, was summoned for selling whisky which was not of the proper standard, as required by the Act of Parliament, on August 15th. Defendant pleaded guilty, and the offence was proved by Police-sergeant Barton. The certificate of the Analyst (Dr. Angell) showed that the whisky had 85.4 parts of added water. Defendant said the fact was that the whisky was not intended to be retailed in the bar. It was whisky and water which was made up for his wife, who was suffering from Bright's disease, and by some mistake the bottle, which was labelled "whisky," had been taken into the bar. The whisky was served by his daughter, who had not noticed that her sister had brought the bottle into the bar, and it was not discovered until some days later. The Chairman: Did you inform the police of the discovery? Defendant: I did not. The Chairman: But you might have done so, and it would have explained the matter to them. Defendant: I thought the matter had gone too far for me to interfere. Sergeant Barton said that the whisky was drawn from a jar, or stone vessel, with a top such as was kept in fully licensed houses. The defendant's daughter was called, and said that the whisky was not taken from the jar, as described by the sergeant, but from a pint-and-half bottle, which was used for her mother, and by mistake had gone into the bar. Mr. Barton, in answer to the Bench, said he was sure the whisky was not taken from a bottle. Miss Bailey declared that it was, and also that the jar as described by the sergeant was never used; they were only for ornament. The defendant also asserted that this was so. In answer to the Bench, Sergeant Barton said he never saw a bottle handled during the sale. Miss Bailey turned her back to him when she got the whisky, and certainly he could not see her touch the tap, but she must have done so, as he saw no bottle. Defendant: I must contradict you. The barrels have not been used for two years. The Bench fined the defendant 10s. and the costs, 17s. 6d., and warned him to be careful in the future, at the same time telling him that when he discovered the mistake that had been made he should have at once communicated with the police. Mr. Bailey said he would be careful, and he thanked the Bench for the leniency shown him. The license to the house was not renewed at the Licensing Sessions held a fortnight since, consequent on this case pending, but the Court now at once renewed the license.—Mr. Bailey thanked the Bench for the renewal.

AN INGENIOUS DEFENCE.

At Bromley (Kent) Petty Sessions, on the 26th September, Robert Stuart Gladstone, trading as Kirby and Sons, milk purveyors, Bromley, was summoned for selling milk adulterated with 12 per cent. of added water. Mr. Low, instructed by the solicitors for the Kent County Council, prosecuted; and Mr. Ricketts defended. The sale to Mr. Tucker, an Inspector of weights and measures under the County Council, and the analysis and report of the County Analyst having been proved, Mr. Ricketts asked for the third part of the milk which the Inspector had retained. Mr. Tucker said the bottle in which he had retained a part of the milk had exploded, and he now produced the remains of the bottle, and the solids residue of the milk. In these circumstances Mr. Ricketts contended that the 21st Section of the Act had not been complied with, which made it imperative that the sample be produced in Court, so that a further analysis might be made if required. The Bench held that the third sample retained was for the use of the Court should the Magistrates require further analysis, and they overruled the objection. Mr. Ricketts then put in a contract for the supply of pure milk to the effect that each and every delivery would be unadulterated as it came from the cow. Mr. Low contended that no evidence had been adduced to show that this milk was a part of the milk supplied under the contract, and that Mr. Gladstone had not tested the milk so as to remove all doubt as to its being of the quality required under the contract. The Bench deliberated a long time in private, and found that there was no evidence to show that the milk had been delivered under the contract, and that the defendant had failed to test the milk while he had the means of doing so. They inflicted a fine of £2 and Court costs.

At Bristol Police-court, on September 22nd, Charles Field, Kingsland-road, was summoned for selling adulterated lard. Mr. White, Inspector under the Food and Drugs Acts, said on Monday he went into the defendant's shop and asked for a pound of lard, which was supplied by one of the assistants. He then told him it was for analysis, and, having divided it into three parts, one was sent for analysis. The certificate of the Public Analyst stated that in his opinion the lard contained not less than 12 per cent. of beef stearine. For the defence it was contended that Mr. Field was exempt under

SICILIAN WINE VINEGAR,

GUARANTEED ABSOLUTELY PURE.

The purest of Vinegars; guaranteed to stand any Analytical test; pure from start to finish; needing no distillation, but a natural unsophisticated product, ensuring perfect digestion not possible in the various manufactured Acetic Compounds.

To be obtained of all the principal Grocery Establishments and Stores.
Write for Samples and Prices to

READ & DIGHT, Sole Proprietors, 72, Mark Lane, London, E.C.

Sub-section 1 of Section 6 of the Act, which said that there was no offence "where any matter or ingredient not being injurious to health has been added to the food or drug, because the same is required for the production or preparation thereof as an article of commerce." It was alleged that the lard was sold in bladders which were marked "pure," and they came like that from the merchants. The lie was advanced that stearine cost more than American lard, and was put into lard merely to stiffen it. The Bench pointed out there was such a thing as pure lard, and Superintendent Wookey concurred, saying samples were very often taken and found to be pure lard. The Bench inflicted a fine of 20s. and costs, and intimated there was not the slightest imputation on the defendant personally.

WAS THIS ONE OF LLOYD'S EIGHT PER CENT. COWS?

At Billericay, Essex, on September 26th, Harry George Moore, of Stock, milkseller, again appeared, charged with selling milk on the 11th of August last adulterated with 8 per cent. of water. After examining a further report from Mr. Pooley, the Analyst, the Chairman said there was some doubt in the case, and they should give the defendant the benefit of it, and dismiss the summons.

CORRESPONDENCE.

ALUM IN BAKING POWDER.

To the EDITOR of FOOD AND SANITATION.

SIR,—I am reported in your edition of September 30th to have said before the Lexden and Winstree Justices: "I shall be able to show that the alum is very much inferior." The above is incorrect, what was stated is: "I shall be able to show that alum is much cheaper than the proper ingredients."—Yours, &c.,

HERBERT G. AKERS, Superintendent.

Colchester, October 1, 1893.

ANSWERS TO CORRESPONDENTS.

[Owing to pressure of space, several communications have had to be left over until next week.]

DR. VERNON, SOUTHPORT.—Sorry cannot insert letter this week. It will appear in next issue.

SANTAS, LEEDS.—Will write you personally. It is rather a nice point.

TINCTURE OF RHUBARB.—We are getting some details as to the Magistrates, and shall deal with the case next week.

Food and Sanitation,

THE ANTI-ADULTERATION JOURNAL;

To protect the Public from Adulterations of every kind. A Newspaper to support English, Irish, Scotch and Welsh Industries, and to suppress Foreign Free Fraud in all imported articles. A Journal for manufacturers, Merchants, Wholesale and Retail Traders, Grocers and Provision Dealers, Dairy Farmers, English and Irish Produce Merchants and Bacon Curers, Pure Beer Brewers, Distillers, Fruit Growers, and Agriculturists.

Published Weekly by M. HENBY, at 183, Strand, London, W.C. Subscription per annum, Post Free, 6s. 6d.

POWELL'S BALSAM OF ANISEED—FOR COUGHS.

Powell's Balsam of Aniseed—Coughs and Asthma.
Powell's Balsam of Aniseed—Coughs and Bronchitis.
Powell's Balsam of Aniseed—Coughs and Hoarseness.
Powell's Balsam of Aniseed—Coughs and Lung Troubles.
Powell's Balsam of Aniseed—Coughs.—Safe and Reliable.
Powell's Balsam of Aniseed—Coughs.—Established 1824.
Powell's Balsam of Aniseed—Coughs.—Refuse Imitations.
Powell's Balsam of Aniseed—Coughs.—Sold by Chemists.
Powell's Balsam of Aniseed—Coughs, Night Cough, Influenza.
Powell's Balsam of Aniseed—Coughs Relieved Instantly.
Powell's Balsam of Aniseed—Coughs.—The Oldest Remedy.
Powell's Balsam of Aniseed—Coughs.—Trade Mark.
Powell's Balsam of Aniseed—Lion, Net, and Mouse.
Powell's Balsam of Aniseed—1s. 1½d., 2s. 3d.

THE BRITISH INSTITUTE OF PUBLIC HEALTH.

The Examiners appointed by the Institute will hold an Examination for the Certificate of competency as a Sanitary Inspector on Friday and Saturday, the 27th and 28th October. Candidates intending to present themselves for examination must give notice thereof in writing on forms to be obtained on application to the Secretary, 20, Hanover Square, London, W., not later than the 19th October.

Every Candidate who passes the Technical Examination to the satisfaction of the Examiners will receive a Certificate testifying to his knowledge of what is required for the duties of a Sanitary Inspector.

C. A. JAMES, Secretary.

September 14th, 1893.
20, Hanover Square,
London, W.

WHEAT PHOSPHATES NOURISH BRAIN and FRAME, FORM BONE, TEETH and MUSCLE, and ENRICH the BLOOD



FRAME FOOD"DIET

Is the only food which contains the Wheat Phosphates extracted from wheat bran, and is therefore the most Nourishing food for Infants, developing the Bones, Muscles, Teeth, and Brain. In process of manufacture, great attention is paid to the Conversion of the Starch into dextrine, thereby rendering the Diet specially suitable for the weak digestive powers of Young Infants. For Invalids it is restorative, invigorating, easily digested, and retained by the weakest stomach when all other food is refused. For Adults it is a delicious breakfast or supper dish. Vitalises the brain, and all the functions of the body.

$\frac{1}{2}$ -lb. Sample in HANDSOME ENAMELLED Tin sent free on receipt of 3d. for postage (mention this Paper).

Sold by Grocers, Chemists, &c., in tins, 1 lb. 1s.; 4 lbs. 3s. 9d.; or sent carriage paid by

FRAME FOOD CO., LD., Lombard Road, BATTERSEA, LONDON, S.W



FRAME FOOD"JELLY

Is made of "Frame Food" Extract of Wheat Phosphates and pure Cane Sugar, and is therefore most nutritious. It possesses all the nourishing and digestive properties of Malt Extract, whilst it is as delicious and cheap as jam. It is eaten with relish by children on bread and butter, or in puddings, &c.

Dr. F. ARNOLD LEES, M.D., M.R.C.S., Eng., L.R.C.P., Lon., says:—"Young children grow very fond of the Jelly—spread on bread and butter—and grow heavier and stouter when using it in a ratio out of all proportion to the weight of the Jelly eaten, showing that it not only nourishes but assists assimilation of other foods."

Sold by Chemists, Grocers, &c., in jars about 1 $\frac{1}{2}$ lbs., at 1s.

Sample 1 lb. jar sent post free for 10d. by

THE PUREST OF ALL SCOTCH WHISKIES.

D. LENNOX & SONS

LONDON OFFICE:

41, PALL MALL,

S.W.

Bonded and

Bottling Stores:

DUMFRIES,

N.B.

36/-

42/- 48/-

PER DOZEN CASH.

Delivered within London

Carting Circuit, or Carriage

Paid to nearest Railway Station

in Great Britain.

Do not drink Blends of Malt Grain
and Potato Spirit.

Medical Men and Connoisseurs will find this the
perfection of an absolutely pure & wholesome spirit.

FOOD & SANITATION.

CO-OPERATIVE SOCIETIES AND FRAUD.

A scandal to which Grocers' Associations ought to direct their attention is the very serious one that co-operative stores practice fraud in food stuffs with impunity, and that in the few cases where they can be reached, Magistrates, through venality, corruptness or folly refuse to convict them as they do individual traders. Again and again our columns have recorded these shameful prostitutions of justice. In our issue of January 28th, we reported a case where the Burnley Co-operative Society was summoned for selling butter containing excess water, there being 20 per cent. in a sample purchased. Butter ought not to contain more than 12 per cent., and 16 is the very outside limit, and it came out in evidence that £500,000 of the adulterated butter was sold in Lancashire and Yorkshire alone, i.e., that the Co-operative Societies were taking some £40,000 per year extra profit for water made to stand upright and sold by them as butter. But a co-operator was on the Bench and the case was dismissed. Yet retail grocers and butter factors are daily being convicted

CALVERT'S CARBOLIC OINTMENT,

Large Pots, 13d. each, with full Instructions.

Court Circular says: "We cannot too highly recommend Calvert's Ointment. It is the best general Ointment with which we are familiar, and ought to be a stock remedy in every household."

Private report from Limassol Cyprus: "I have never found anything to come up to it for neuralgic 'Rheumatic Pains.'"

Samples sent Free by Post on receipt of value.

F. C. CALVERT & CO., MANCHESTER.

Awarded 60 Gold and Silver Medals and Diplomas.

and punished by fines for this adulteration. Shameful to the authorities as the Bolton case was, there occurred later one at Saddleworth of even a worse type.

In this magisterial protection of fraud the defendants were the Dobeross and Delph Co-operative Society, summoned by Mr. A. L. Bridge, Inspector of Weights and Measures, &c., for selling butter which was not of the nature and substance demanded. Mr. Hiley, from the office of the West Riding Solicitors, Wakefield, was for the prosecution, and the manager of the store was defended by a solicitor from Oldham, at the instance of the Wholesale Co-operative Society, Manchester. The Court was crowded, a large proportion of the audience being composed of farmers, and the proceedings lasted over three hours. The evidence of Mr. Bridge, supported by the certificate of the County Analyst, went to show that the butter, which was Irish, contained 21 per cent. of water. The defence was that butter could not be made up without water. Mr. Mallalieu, one of the magistrates, strongly denounced the Act under which the proceedings were brought. A gentleman from the Co-operative Wholesale Society's Office, Manchester, was one of the witnesses called for the defence. He said the butter was sound, and the Society had, since this year came in, imported considerably over one million pounds of butter. In cross-examination he declined to say one-fifth of the bulk, as in this case, consisted of water. The Magistrates, after consulting in the ante-room, returned into court and the chairman announced that they had decided to dismiss the case, and it was dismissed accordingly.—*Huddersfield Examiner*, April 29th.

It is scarcely necessary for us to cite more instances to prove that there is one law for co-operative societies, and another for the retail grocers. The following prosecution is another Saddleworth one, and instructive, as showing how Magistrates deal with co-operative offenders.

At the Saddleworth Police-court, on the 27th September, John Wrigley, manager to the Grasscroft Co-operative Society, was summoned for a breach of the Food and Drugs Act. Mr. Bridge prosecuted. He said on the 30th June he went to the Grasscroft Store, and purchased of the defendant some tincture of rhubarb, for which he paid. He then told the defendant it was for analysis, and divided it in the usual way. He forwarded the tincture of rhubarb to Mr. Allen, the County Analyst, and subsequently received the following report:—"The sample was destitute of saffron, which is directed by the British Pharmacopoeia to be employed in the preparation of tincture of rhubarb in the proportion of a quarter of an ounce to the pint." Mr. Bridge added that saffron was a very expensive drug. Defendant pleaded not guilty, and said the tincture of rhubarb was in stock when he became manager. They had neither any means of ascertaining from whom it was purchased. Mr. Bridge: I believe there was a label on one of the bottles. Defendant: The maker's name was not upon it. The Chairman asked if the deficiency of saffron affected the medicinal value of the drug. Mr. Bridge did not know. He believed it was mostly used as a condiment to take off the harsh flavour. Defendant: I have seen a chemist since, and he said saffron was only used for colouring. Mr. Bridge: It is a very expensive drug, and if we don't keep it up to the standard honest shopkeepers will be injured by being undersold. The Chairman (Mr. R. S. Buckley): You will be fined 5s., without costs.

The Inspector's costs were refused, and the case entailed an expense upon the West Riding County Council of £1. The Society had been cautioned by the Inspector to see they got a warranty, yet in the face of these facts the County Council are really fined 15s. for presuming to summons a Co-operative Society for

adulteration. We would suggest that these object lessons in co-operation should be added by Mr. Arnold Forster, M.P., to the next edition of his idiotic text-book, and that the flatulent philosophic Mr. Acland might incorporate them in his next discourse on the beauties, moral and social, of co-operation. Now that the Government—edited—"sweated—printed" *Labour Gazette* is propagating co-operation, its amateur editors might usefully devote a little attention to a scandal so disgraceful to co-operation as is here disclosed. They might ask, and grocer's associations might usefully demand to know why it happens that from year's end to year's end there is never a sample taken from the Civil Service, Army and Navy, and other large Co-operative Stores by Food and Drugs Act Inspectors for analysis, whilst those taken from retail grocers may be reckoned by thousands. We promise our readers some more very instructive object lessons in co-operation at an early date.

HE SHOULD PROSECUTE THE WHOLESALE DEALER.

If Mr. Charles Godden, of Southampton, be wise, he will, in his own interest and in that of his fellow-retailers, sue and make an example of the wholesale butter dealer who placed him in the fix in which he stood on the 6th inst.

Mr. Godden was summoned by Inspector C. J. Rabbetts for an offence under the Food and Drugs Act. Mr. Keels (for the Town Clerk) appeared to prosecute, and Mr. W. L. Bell defended. Mr. Bell admitted the offence, and said it was a most unfortunate case, arising out of an entire mistake. The defendant was in a large way of business, and did not, to his knowledge at least, sell margarine. In this case when the purchaser asked for butter, defendant genuinely believed he sold him what he required, and was amazed to find it turn out margarine. It had been sold to him, charged for, and invoiced as butter, and how the mistake occurred he could not say. The defendant had himself asked that the case should be adjourned so that he could consult Dr. Ansell, and he had done so, the doctor's analysis practically agreeing with that of the Borough Analyst. A fine of 20s. and costs was inflicted.

[In justice to himself and his character he ought to bring an action against the gentleman who sold margarine to him as butter.]

WHAT CONSTITUTES A CONTRACT?

At Brentford, on Oct. 7th, Albert Bailey, of 9, Brent-cottages, Greenford, in the employ of Thomas Cain, of 29, The Grove, Ealing, was summoned by Inspector Tyler for having refused to supply a quantity of milk for analysis when demanded. Mr. Keith Frith, barrister, appeared to defend. Inspector W. Tyler deposed that on the 20th of last August he was in Ealing early in the morning and saw the defendant with another person in a cart. He saw the other person leave some milk at a house, and he then went up to the cart, in consequence of something his assistant told him. The defendant said he was in charge of the vehicle, and witness asked to be served with a pint of new milk. Defendant replied "It is all ordered." Witness said that as Inspector he was entitled to be served, handed up a jug, and tendered twopence. Defendant said "My master has told me not to sell," and refused to sell a sample. Witness went into the cart, and saw five cans there, four containing a quart each. Each had a piece of paper in it, but no names were on the papers. He saw a large can in the cart containing two quarts of milk, and the witness demanded to be served from it, a request defendant refused to comply with. Cross-examine: Defendant did not say "After the end of the round I will take you to the shop." These proceedings were taken under the 17th Section of the 1875 Act; the section of the Act did not state that any officer could take a sample of any food or drug exposed for sale by retail upon any premises, but the 3rd Section of the 1879 Act gave power to an Inspector to procure at the place of delivery a sample of milk in course of delivery to a purchaser in pursuance of any contract. He believed the milk was exposed for sale; that was his opinion, and not being delivered in pursuance of "any" contract. If he knew that some milk had been sent to a customer, and he saw it on the way, he should not be justified in taking any. He regarded the cart as the defendant's master's "Stores" within the meaning of the section—coupled with the 5th Section of the 1879 Act. Mr. Keith Frith called Mr. Henry Cain, who said that his man was sent out with five cans, which he was to deliver to five different houses, according to the round book. There would be different quantities in each can. The milk had been ordered the day previously. His man had no right to sell any of the milk to anyone on his round; he had no measure with him, the master was not present at the time, and there was no evidence given as to this, and his orders were to deliver what was given him. By Mr. Tyler: A special cart was sent out with the milk to save time. The only contract he had was the ordering the day previous. According to his round book, a quart was to be delivered to each person. He was *unaware* ??? two quarts were in one can. The Bench thought the Inspector had made a mistake in his procedure; having learned that the milk was being sold under a contract, he should have procured a sample under the Amending Act. The summons was dismissed. It is obvious that if this is the law, then no Inspector can check the quality of the milk that is being delivered to a customer for where is the private individual to be found who would go to a Police Court to prove a "Contract" as to a quart of milk.

Do you sell a genuine article? If so, Grocers won't believe you do if it is not advertised in

"FOOD AND SANITATION."

A WARNING TO REFRESHMENT CONTRACTORS.

We have repeatedly urged the unfairness of taking samples mainly from small shopkeepers and leaving "the best the world produces" gentry to do as they please. The Civil Service, Army and Navy, etc., Stores, Spiers and Pond's, the Midland, Great Northern, and other large refreshment caterers never have samples taken from them. They may sell everything of genuine quality and strength, but that is beside the point, which is that they should be subjected to visits from Inspectors, and samples ought to be taken for analysis in the same manner as they are from the meanest public house or the smallest shop. We are glad to see the Kensington Inspectors have made a start in this good work. That they have found milk at 2d. a glass minus 33 per cent. of its fat, and dosed with 25 per cent. water is exactly what, from experience, we would expect, and what were, samples properly taken from large caterers, would be found to be the case very generally throughout London and the provinces. We hope the following will open the eyes of readers of our journal who have overlooked stores, etc.

At the West London Police-court, on October 5th, there were three summonses against John Bertram and Co., refreshment contractors, for selling adulterated milk in the Earl's-court Forestry Exhibition. The defendants were represented by their manager. Mr. Chambers Leete, Clerk of the Kensington Vestry, who supported the summonses, said the Vestry received information that milk of an inferior quality was being sold in the exhibition, and directed the purchase of samples. In one case 1d. was paid for a glass of milk and in two others 2d. was charged for each glass. Strange to say the 1d. glass was found better than those for which 2d. each was charged. It appeared that the purchases were made by two of the Vestry's Inspectors on September 31st. Henry Hawkins went to No. 8 arena bar and purchased a glass of milk for 1d. The certificate of the Analyst showed that the sample contained 25 per cent. of extraneous water. He also purchased a glass of milk at No. 4 refreshment bar in the Bastille and paid 2d. for it. The certificate of the Analyst showed that the sample contained 25 per cent. of extraneous water and the extraction of fat to the extent of 33 per cent. The third sample was purchased by Arthur Ellenden, another Inspector, at No. 3 bar at the exhibition, 2d. being paid for the glass of milk. The certificate of the Analyst was exactly the same as the last—25 per cent. of added water and 33 per cent. of fat extracted. The manager addressed the Magistrate and wished him to look at the contract he held in his hand. Mr. Curtis Bennett declined, and said if the defendants wished to prove the contract they should have attended. The manager was not one of the defendants, neither was he a solicitor, and therefore he refused to hear him. In passing sentence the Magistrate observed that it was a bad case. He fined the defendants 40s. in the first, £10 in the second, and £7 in the third case, with 12s. 6d. costs on each summons.

HE SHOULD PROSECUTE THE WHOLESALE DEALER.

At the County Magistrates' Court, Birkenhead, on the 5th inst. before Messrs. T. B. Bushell and W. Bingham, Patrick O'Hanlon, shopkeeper, Upton, was summoned by William James Hallard, a Cheshire County Council Inspector, for selling butter not of the nature, substance and quality demanded. Inspector Hallard stated that on the 28th of August last he visited defendant's shop and purchased $\frac{1}{2}$ lb. of butter, for which he paid 10d. He told the defendant's wife he was the Inspector under the Food and Drugs Act, and that it was his intention to take it to the Public Analyst for the purpose of analysis. He offered to divide it into three parts, which was accepted. He gave one to defendant's wife, took one to the County Analyst (J. Carter-Bell), and kept one himself which he produced. Subsequently, he received the Analyst's certificate, which stated "This is not a sample of butter but it is a sample of margarine." Mrs. O'Hanlon was then called, and stated that she bought the butter from G. Turtle and Sons, grocers, 169, Church-road, Higher Tranmere. She produced the bill for it, having received it only three days before the Inspector called. In reply to the Chairman, she said she did not deal in margarine at all. She sent word by the youth who brought the groceries the following day that a sample of the butter had been taken, and the manager sent her a note saying, "The butter supplied to Mrs. O'Hanlon is pure butter." A shop assistant, in the employ of Messrs. Turtle, was called, and deposed that he made up the parcel of what was supposed to be butter, and that he had made a mistake. Mr. Hallard: Did you make up this parcel of 12lbs. of butter? Witness: Yes. Was there any label on the butter you took it from? No answer. Was there any label on the lot you cut this 12lbs. from stating it was margarine? Witness: Yes; on the dish. Mr. Hallard: Then you made no mistake. Mr. Hallard informed the Magistrates that the defendant had his remedy against the wholesale dealer under the same Section of the Act. He (the Inspector) had no power to prosecute them, and that was how they imposed on the small shopkeepers and hid themselves behind them. The Bench said it was their duty to protect the public from gross fraud, and they must fine the defendant 20s. and 14s. 6d. costs. Mr. Hallard did well to put this point so plainly to the Bench. As the shopkeeper has the power to recover damages from the wholesale dealer, and the case was so gross a one, we must say a fine of 34s. 6d. in all is very inadequate. We shall be curious to know if this retailer sues the wholesale dealer.

Do you want to avoid prosecutions for adulteration?
Read "FOOD AND SANITATION."
Send on your 6s. 6d. to the Publisher, 188, Strand, and get the journal post-free for a year.

"I was advised by a friend to try your Lung Tonic. To my most agreeable surprise, after the third dose I was able to officiate with perfect ease. I resolved henceforth to add your valuable medicine to my household remedies, and certainly shall never be without it." (Rev.) F. C. S. KRENIG, Vicar of St. Barnabas, Hull.

Owbridge's Lung Tonic.

"As a public speaker and singer, I always find it invaluable for clearing the voice. It acts like magic on my children for throat and chest complaints, and I have known it save life when given up by three physicians." JOHN BAILEY, Pastor, P.M. Church, Ramsgate.

It Never Fails.

"My youngest daughter was cured of a very heavy cold before she had taken the second bottle when in a weak state, and has been stronger ever since. All my family use it now with great benefit when they have colds." E. EVANS, Chapel House, Abermule.

Owbridge's Lung Tonic.

"As a patent medicine it is unrivalled. I have given it to Mrs. Forshaw for severe asthma and bronchial affections, combined with much coughing, and it has immediately given relief when all other remedies have failed. I have long recommended it for chest diseases." CHAS. F. FORSHAW, D.D.S., Bradford.

Try it
for
a
Cough.

Try it
for
a
Cold.

Try it
for
Whooping-
Cough.

Try it
for
Consumption

Try it
for
Asthma.

Try it
for
Bronchitis.

Try it
for
ALL
Chest
Affections.

"I have much pleasure in certifying that your Lung Tonic is a most valuable remedy in cases for which it is recommended. I have given it a place in my surgery, prescribed it in several cases, and can thoroughly recommend it. You are at liberty to use my name." JOHN GREEN, M.R.S.C.L., Keadby, Yorks.

Owbridge's Lung Tonic.

"A few weeks ago I caught a severe cold, which affected my breath so that I could not lay down in bed. A relative told me of your tonic. One bottle completely cured me. Several bottles of medicine from local doctor did me no good." S. LEVY, Holloway Head, Birmingham.

It Never Fails.

"Your Lung Tonic I have used for Years. I think it my duty to let Bathers know how valuable a medicine it is for the cure of colds. I have found invaluable benefit from it, and could not carry on my profession without it." M. BIBBERO, Professor of Swimming, 416, Mile End Road, London.

Owbridge's Lung Tonic.

"I wish to add my testimony to the great curative properties of your Lung Tonic. Have many times had proofs of its value in my family, and would not think it safe to be without a bottle of it in the house. I believe it has been the means of saving me many a doctor's bill." W. S. HOLLINGWORTH, Clifton Street, Manchester.

Prepared by W. T. OWBRIDGE, Chemist, Hull.

Sold in Bottles, 1s. 1½d., 2s. 9d., 4s. 6d., and 11s., by all Chemists and Patent Medicine Vendors.
Wholesale all London and Provincial Houses.

Important Notice to the Public, Chemists, and all Retailers of Patent Medicines.

OWBRIDGE'S LUNG TONIC does not contain any Scheduled Poison, therefore ALL persons holding Patent Medicine Licences can sell it, and no one has a right to attach "Poison" labels to the bottles.

This Notice and Caution have been rendered necessary by the recent action of the Pharmaceutical Society in reference to Patent Medicines.

The known superiority of OWBRIDGE'S LUNG TONIC as a SAFE and effective remedy for Coughs, Colds, or any affection of the Lungs, makes it important the Public should know that no difficulty exists in obtaining it.

GROCCERS AND CHEMISTS.

The Pharmaceutical Society is making a determined effort to secure a monopoly of the sale of patent preparations to Chemists alone. We shall be curious to see at what point the Pharmaceutical Society will stop. Already the chemist has encroached upon the physician's domain, and makes his own remedy for every complaint under the sun. He gives medical advice, and charges for it without knowing anything of the healing art. He is a tea-dealer who does not understand tea, and amateur grocer, to whom food qualities are mysteries; he is a mineral water maker and a licensed victualler who gets rid of port that knows no grapes, and Swillsby's clarets, whiskey, brandy, &c. He has a business in which he can sell articles at 500 per cent. or more profit, and he is visited by no Food and Drugs Act Inspector, for—thanks to the close Corporation, that rules his society and watches the pharmaceutical preserves, the British Pharmacopœia is so indefinite, that in only about two articles comprised in it, can he be prosecuted for adulteration. The thousands of articles he vends, he can sell adulterated or otherwise as suits his own sweet will, and no law can touch him. Some 29,000 samples are annually taken under the Food and Drugs Acts, but the drugs only formed 740 of these, and the penalties were only £11 14s. Yet, with the liberty to practice adulteration as he pleases and thus encroach upon every trade, the chemist and druggist is not satisfied. There is a large profit on patent preparations, and the grocer has been getting some of that profit. The chemists' fingers itch to touch it, and an excuse has to be found for him to get a monopoly in it. The Pharmacy Act is invoked and preparation after preparation wrenched from the grocer to swell the chemists' profits. Statements devoid of one shred of truth are made that it is out of regard for the public safety that grocers must be debarred from vending any patent preparations that contain even the most minute quantities of any poisons. A more impudent untruth for spoilation purposes it would be hard to imagine. Our views upon patent medicines are well known to our readers. If the Government, for the sake of a small duty, allows them to be sold, then the *soothing syrup, the mixture or the infallible specific is, if poisonous, just as deadly when sold by the chemist as by the grocer*, and no one can, with a vestige of truth, assert the contrary. If the Pharmaceutical Society were concerned with what ought to be its duty, the stamping out of the sale of quack and useless nostrums; if it busied itself with suppressing drug adulteration, or published a pharmacopœia that was other than a disgrace to science, something might be said in favour of its professions and its attempts to drag the sale of patent medicines away from grocers. Whilst it permits the most deadly of all fraud abominations—uninterfered with drug adulteration—that makes impotent the skill of the ablest physician and paralyzes his powers, and thrusts the sick into the grave by fraud practised for the sake of gain, any pleas of disinterested regard for the public well-being that it may make should receive scant public support. A patent medicine that contains poison, we repeat, is just as poisonous and just as dangerous when sold by a qualified person as by an unqualified one, and the Pharmaceutical Society in attacking the grocer instead of the preparation, shows that it is not public health it hankers after, but the profits to be made out of the sale of *patent* medicines. Grocers, therefore, should carefully note what preparations they may yet sell without interference by the Pharmaceutical Society, and, if they be wise, will demand that more stringent measures be adopted against pharmacists, who, alone in England, may practice fraudulent and deadly adulteration, without any Public Analyst or Inspector having the power to haul them before the Courts and punish them.

THINGS EXHIBITED AT THE DAIRY SHOW.

A collection of prize cattle the finest in the World.

A collection of prize machinery, the finest for butter making to be found in the World.

A collection of prize ignoramuses who own the finest cattle and the finest pastures in the World, and who have at their command the finest machinery, but who are so destitute of knowledge and business capacity, that less favoured countries like Denmark, France, Germany, Sweden, Italy and even Australia can thrust English butter from our markets.

THINGS NOT EXHIBITED AT THE DAIRY SHOW.

The "Eight per cent. water herd of cows."

A copy of Mr. Lloyd's "eight percent. water" in milk analysis giving the figures.

Dr. Bell's milk analysis with our corrected calculations, showing as high as 2 per cent. of error in the Somerset House figures.

One particle of business aptitude or capacity to grasp the truth as to the real causes why English dairy farming is "nowhere."

WHAT IS VINEGAR?

By the courtesy of Mr. A. H. Allen, past president of the Society of Public Analysts, and Mr. C. G. Moor, B.A., F.C.S., we are able to supplement the facts on vinegar already given in "FOOD AND SANITATION" by the following article upon Vinegar by these able authorities.

VINEGAR.

By ALFRED H. ALLEN, F.I.O., AND C. G. MOOR, B.A., F.C.S. Recent prosecutions for the sale, as vinegar, of an article consisting essentially of acetic acid obtained by the distillation of wood, have caused pharmacists generally to consider their position with regard to such an article, and to enquire what is properly to be understood by the term "vinegar."

To go back to the actual derivation of the word, the term vinegar is a corruption of the two French words, *vin aigre*, literally meaning "sour wine." Wine vinegar is still largely used in France, that manufactured from white wine being more esteemed than the darker kind; but in England malt vinegar is held in high esteem, while in America cider vinegar is largely used. In all these cases the vinegar is a product of the acetous fermentation of an alcoholic liquid, and there is no doubt that it is to the subsidiary products of this fermentation that vinegar owes its characteristic flavour and taste. Whether the term "vinegar" should be restricted to products of the above kind, or should be held to include acetic acid from other sources when suitably coloured and flavoured, is a point now exciting attention, and which we propose to consider in detail.

Ordinary dictionary definitions of technical products are not unfortunately unreliable, but it is nevertheless of interest to note the description of vinegar given in some of our leading Dictionaries and Encyclopædias.

The "Imperial Dictionary" gives the following definition and description of vinegar:—

"Dilute and impure acetic acid, obtained by the vinous fermentation. In wine countries it is obtained by the acetous fermentation of inferior wines, but in this country it is usually procured from an infusion of malt which has previously undergone the vinous fermentation. Vinegar may also be obtained from strong beer, by the fermentation of various fruits, or of a solution of sugar, mixed with yeast; in short, all liquids which are capable of the vinous fermentation may be made to produce vinegar."

The "Encyclopædia Britannica" states that:— "Vinegar is a dilute form of acetic acid, having a flavour that varies according to the source from which it is obtained. . . . The nature of acetous fermentation, and the rationale of the processes by which vinegar is prepared, are explained under 'Fermentation'; and the acetic acid obtained by the destructive distillation of wood, is dealt with under 'Tar.' Here we have only to do with the various kinds of vinegar used for table, medicinal, and other household purposes."

In the first edition of Watt's "Dictionary of Chemistry," vinegar is classed under the separate heads of "Wine Vinegar," "Malt Vinegar," "Distilled Vinegar," and "Wood Vinegar." In the new edition there is no distinct definition of Vinegar. Under the preparation of acetic acid is the following passage:—

"Under the influence of ferments. This is the ordinary process of making vinegar from alcoholic liquids, wine being generally used for the purpose in France and Germany, and malt in England."

T. E. Thorpe, in his "Dictionary of Applied Chemistry," vol. i. states that

"In all processes for the manufacture of vinegar advantage is taken of the oxidising action of the vinegar-fungus already described; the souring of wines and other alcoholic liquids is due to this organism; the germs of which are always present in the air, and are deposited and grow in any suitable medium."

A. H. Allen, in his "Commercial Organic Analysis," vol. i. says that

"Properly speaking, vinegar is a more or less coloured liquid, consisting essentially of impure dilute acetic acid, obtained by the oxidation of wine, beer, cider, or other alcoholic liquid. Sometimes the term is improperly extended to pyroligneous acid or 'wood vinegar,' while acetic acid is called 'distilled vinegar.'"

S. P. Sadtler, in his "Industrial Organic Chemistry," page 331, says:—

"Only such materials will be considered here as give rise to a vinegar by the normal acetic fermentation. The manufacture of acetic acid and technically important acetates will be spoken of later, under pyroligneous acid, as derived from the destructive distillation of wood. The materials referred to as furnishing vinegar under the influence of the acetic fermentation are—first, wine; second, spirits; third, malt-wort or beer; fourth, fermented fruit juices other than wine; and, fifthly, sugar-beets."

W. T. Brandt, on page 20 of his "Practical Treatise on the Manufacture of Vinegar and Acetates," says:—

"For consumption on a large scale, especially where only a body of an acid taste is required, the use of so-called 'vinegar essence'—(i.e., pure 80 or 90 per cent. acetic acid) prepared from wood, and which, when properly diluted, furnishes ordinary vinegar, will undoubtedly gradually supersede vinegar prepared from alcohol, it being considerably cheaper. And notwithstanding that the price of vinegar essence is decreasing every year, in regions where wood is plentiful and cheap its manufacture is a well-paying industry, on account of the many valuable by-products (tar, wood-spirit, charcoal) obtained besides acetic acid. Even at the present time for all industrial purposes where acetic acid is required—as, for

instance, in the manufacture of tar colours—that obtained from wood is used, and the quantities consumed in the fabrication of table vinegar become larger every year. But the manufacture of vinegar from alcohol and alcoholic fluids will nevertheless continue to flourish, because the product obtained from them actually possesses different properties from the pure acetic acid prepared from wood. Vinegar obtained from pure alcohol, and still more so that from fermented fruit-juices, as wine, cider, skins of pressed grapes, or from malt, contains, besides acetic acid and water, small quantities of bodies which, on account of their being analogous to those occurring in wine, may be designated as 'bouquet-bodies,' and which give to the vinegar an agreeable smell and taste, entirely wanting in acetic acid prepared from wood. These properties are so characteristic that anyone gifted with a sensitive and practised sense of smell can at once distinguish pure acetic acid vinegar from that prepared from wine, cider, beer, etc. By the addition of volatile oils or compound ethers, an agreeable odour can of course be imparted to vinegar obtained by diluting pure wood acetic acid with water, but it is impossible to produce the harmonious bouquet peculiar to vinegar from alcohol or fruit-juices, a similar relation existing here as between wine and so-called artificial wine. The latter can be made so as nearly to approach, as regards taste and smell, genuine wine, but a connoisseur will at once detect the difference."

In "Chemistry Applied to the Arts and Manufactures," edited by Charles Vincent, wine vinegar, malt vinegar, fruit vinegar, and pyroligneous acid or wood vinegar are described in separate articles.

In Spon's "Encyclopædia of the Industrial Arts, Manufactures, and Commercial Products," page 2,038, the following passage occurs:—

"Vinegar is an acid liquid, described in the British Pharmacopœia as prepared from malt and unmalted grain by acetous fermentation. The acid contained in vinegar is acetic acid, and it usually exists in the proportion of 5 to 6 per cent. . . . Although the official prescription is adhered to by some manufacturers, the use of those ingredients is by no means usual; indeed, malt, in many instances, is not in the present day used at all, but for it are substituted artificial glucose and cane-sugar or molasses. These latter are very largely used, and as they produce, chemically speaking, the same result—i.e., acetic acid obtained by fermentation—there can really be no objection to their use."

The "National Dispensatory" of Stillé and Maisch states that "Vinegar is a dilute acetic acid, obtained by the acetic fermentation of alcoholic liquids. The materials from which it is prepared influence its colour, and to a considerable extent also its odour and taste."

In Pereira's "Materia Medica" it is stated that "The acetic acid of commerce is derived from two sources—vinegar and pyroligneous acid; the first is procured by exciting the acetous fermentation in certain liquids, the other by the distillation of wood."

A. Wynter Blyth, in "Foods: their Composition and Analysis," describes under "varieties of vinegar" the various fermentation-products, and classes pyroligneous acid among the adulterants of vinegar.

In the British Pharmacopœia vinegar is defined as an "acid liquid, prepared from a mixture of malted and unmalted grain by the acetous fermentation." The specific gravity is from 1.017 to 1.019, and it is to contain about 5.41 of real acetic acid ($C_2H_4O_2$).

The vinegar of the German Pharmacopœia is required to contain at least 6 per cent. of absolute acetic acid. In Russia the minimum limit of strength is 5 per cent.; in Austria, 6; in Belgium, 5.6; in France, 8 to 9; and in the United States, 4.6 per cent.

In 1874 the Society of Public Analysts adopted 3 per cent. of real acetic acid as the minimum limit of strength for vinegar. This limit certainly cannot be said to err on the side of too great stringency, and there have been very few prosecutions for the sale of vinegar containing less than this very moderate proportion of acetic acid.

With regard to the sale of vinegar, the pharmacist stands in a far more delicate position than the general dealer, for it might be argued, with some plausibility, that, when purchased of a registered pharmacist, an article recognised in the British Pharmacopœia ought to comply with the description of it given by that authority. This would limit the "vinegar" to be sold by pharmacists to the very best quality of malt vinegar, and if the B.P. definition of vinegar were legally applied to-day, a considerable proportion of the trade would probably be caught tripping.

With the single exception of Branndt, who appears to hold that vinegar may be legitimately manufactured from wood acid, while admitting that the product is inferior to the fermentation acid, all the authorities above quoted agree in regarding true vinegar as an acid liquid produced by the acetous fermentation of alcoholic liquids, and, consequently regard acetic acid from wood as not answering to the description of genuine vinegar.

WHAT IS VINEGAR?

At the Shire-hall, Nottingham, on September 30th, Elisha Hudson, grocer, Kimberley, was charged with selling adulterated malt vinegar. Mr. E. H. Fraser defended. Mr. Crabtree, Weights and Measures Inspector, stated that on the 24th August he sent his assistant into defendant's shop to buy a pint of malt vinegar. When he came out witness took the vinegar back, and informed Mrs. Hudson that he had purchased the vinegar in order to have it analysed. He divided the vinegar into three parts as usual. He produced the report of the Analyst, which was: I am of opinion that the same is a sample of adulterated malt vinegar. It contains no more than 25

per cent. of real malt vinegar, and no less than 75 per cent. of vinegar not made from malt or grain. Mr. Fraser remarked that for some years Mr. Hudson had carried on the business of a grocer at Kimberley, and without the slightest exaggeration he was one of the most respected tradesmen in the locality. For some time he had dealt with a firm of wholesale dealers in Nottingham who also dealt with a firm called the Pure Malt Vinegar Company. Up to the time of a report of a case of a man at Birmingham who was convicted for selling this peculiar species of vinegar this firm had dealt with the company. The wholesale dealer in Nottingham sent a sample of the vinegar to the University College, Nottingham, to be analysed, and the analysis proving adverse, the dealers cancelled their contract, and so far as they could called in all the vinegar sold to country tradesmen. By some mischance the barrel which had been sold to Mr. Hudson was not called in. In order to show the Bench that Mr. Hudson was dealing with the matter in perfectly good faith, he would produce the label on the barrel which stated, "Pure Malt Vinegar Company, London, best pickling vinegar." Under these circumstances he asked the Bench to say this was only a slight offence. Defendant had not in any way endeavoured to shirk his responsibility, but such responsibility as he had incurred he had incurred unintentionally. The Chairman remarked that notwithstanding the protest that was made in a certain quarter some time ago against the decision of that Bench on a case entirely on all fours with the present one, he ventured to think that the fine of the court of that occasion was right and proper, and they proposed to follow exactly in the same lines now. They accepted the plea put forward by Mr. Fraser, and they thought defendant had properly, and very properly, acted under the circumstances, but at the same time he was not wholly faultless, inasmuch as that apparently he had neglected to take the guarantee which he was able to do, and then the fault or penalty would have fallen upon those who had sold him this vinegar. Having neglected that, he had to a certain extent brought the trouble upon himself. Under the circumstances, they thought the justice of the case would be met by his paying the expenses.

1s. 2d. PER POUND FOR 75 PER CENT. MARGARINE.

At Cheltenham Police-court, on the 3rd inst., Thomas Whittaker, of High-street, grocer, was summoned for selling, as butter, a substance containing 75 per cent. of other than butter fat. Defendant did not appear, but was represented by Mr. H. Lewis, who pleaded not guilty. Police-constable Davis, stationed at Gloucester, and one of the Inspectors appointed by the County Council under the Food and Drugs Act, went to defendant's shop on the 5th September and asked for a pound of butter. The following ensued: Defendant: What price? Constable: I am not particular what the price is, so that it is good. Defendant: Will 1s. 2d. do? Constable: Yes. Defendant sent one of his assistants for "a pound of 1s. 2d. butter." The butter was brought, rolled up, and defendant handed it to the constable, who tendered half-a-crown in payment and received 1s. 4d. change. Then the officer said: Are you the proprietor? Defendant: Yes. Constable: Are you aware who I am? Defendant: No. Constable (producing a certificate): I am a police-constable from Gloucester, and I am buying this butter for the purpose of having it analysed. I will divide it into three parts, and you can take a third. Defendant: It will ruin me if you summon me. It isn't butter. Constable: I bought it for butter. Defendant: Give me that back and I will give you a pound of pure butter. Constable: Certainly not; I have got my duty to perform, and I must do it. Defendant then asked that the sample might be divided, and it was divided accordingly. The officer sealed the sample with the official seal and delivered it to Mr. Embrey, the County Analyst. The Analyst's certificate was produced, and showed that the sample contained 75 per cent. of fat other than butter fat. It should be described as margarine and not as butter. Cross-examined by Mr. Lewis, the witness said that defendant did not tell him that his assistant had made a mistake owing to their being no label to distinguish the store of margarine from that of butter in the cellar. He did not say that his manager was away and that he (defendant) knew nothing about the retail department. Mr. Lewis, for the defence, submitted that there was no evidence of *mala fides* in the defendant, who told his assistant to fetch "a pound of 1s. 2d. butter." Defendant devoted himself exclusively to the wholesale part of his business, and the manager who had charge of the retail trade was away. Margarine and butter were identical in appearance, and in the absence of the manager who would have directed him, the assistant made a mistake. Mr. Lewis further contended that no offence had been committed, inasmuch as the defendant, finding there had been a mistake, immediately offered to rectify it, and consequently the transaction was not as the summons stated it was, "to the prejudice of" the purchaser. He called George Carter, who said he had charge of the retail trade at Mr. Whittaker's. On the day in question he was absent from the business. Before leaving he had rolled 3lbs. of margarine, and put it on the slab in the cellar. The price of margarine was 10d.; that of the best butter, 1s. 2d. There were two lots of margarine and one of butter in the cellar, and they could only be distinguished from each other by taste. The instruction he received from Mr. Whittaker was never to sell margarine as pure butter. The Chairman, in giving the decision of the Bench, said they considered it a very clear case. It was not until the officer stated who he was that defendant suggested that his assistant had or could have made a mistake, and he then at once admitted that it was margarine which had been brought instead of butter. The manager's evidence was quite irrelevant, and if the defendant himself had any explanation to offer he should have attended the Court and given evidence, as it was within his right to do. He would have to pay a fine of £5 and costs.

PECULIAR PROCEEDINGS IN IRELAND.

We do not know Mr. P. M. O'Reilly, or Mr. Masterson, V.C., and we cannot find any record of the noble action that gained the latter gentleman the Victoria Cross; but these little obstacles do not prevent our extending to Mr. P. M. O'Reilly our sympathy. He also had much sympathy from the Granard Board of Guardians:—

At a meeting of that distinguished body, on September 28th, the Guardians present were—P. M. O'Reilly, Esq., Chairman; Messrs. B. Masterson, V.O.; M. Farrell, D.V.O.; J. Green, John Kenny, Thomas Victory, A. E. Edgeworth, J.P., C. Gelshinan, D. Grey, T. Farrelly. Mr. Edgeworth, J.P., in a most elaborate speech proposed the following resolution, which was unanimously adopted:—
“Resolved: That this Board do heartily congratulate Mr. P. M. O'Reilly on his escape from the meshes of the Royal Irish Constabulary, and on the complete rehabilitation of the character of his house of business by the verdict of the Analyst of Somerset House, the highest authority in the country. That the attention of the Government, and the County Longford Grand Jury be called to the crying grievance that an Analyst should be employed, who, by alleging the presence of illegal ingredients in spirits sent to him for analysis by the Royal Irish Constabulary, has thereby seriously injured the business and credit of a respectable merchant in this town; whereas when the same sample of spirits was submitted to competent experts, Sir Charles Cameron and the Principal of the Laboratory, Somerset House, London, it was pronounced by them perfectly unadulterated, and the defendant was complimented in open court by the Magistrates on the complete vindication of his character, and that the Government and the Grand Jury be requested to take prompt and effectual steps to remedy such a very unjust and unsatisfactory state of things.” The motion of Mr. Edgeworth was carried amidst great applause. Proposed by Mr. A. E. Edgeworth, J.P.—“That this Board much regret that the County Analyst, Dr. Tichborne, did not form part of the last ‘expedition’ to Darkest Africa or the North Pole, or to any unexplored country—no matter where—as we feel confident, finding from his astounding feats in analysis, as lately exhibited in the case of, and at the cost of our chairman, Mr. P. M. O'Reilly, that he would have made some very remarkable discoveries rivalling, perhaps, those of the celebrated ‘Baron Munchausen’—even if there had been nothing to discover, and we earnestly hope that he will take the earliest opportunity of an expedition in the interest of science, but certainly very much to the advantage and peace of mind of the innocent and harassed licensed publicans, who have now a new and home engine of terror already added to the Tichborne analysis—the complete cunning of the Royal Irish Constabulary.” (Hear, hear.) The motion was carried unanimously.

The grammar of the second resolution is a little indefinite, but its meaning does not possess that fault. It is clear, painfully and bluntly clear. But we have two objections to make, one to its recommendation, and the other to its censure of the Royal Irish Constabulary. We do not think Professor Tichborne should be recommended for a Polar Expedition. The virtualising of such an expedition is the most important part of it. Now, suppose for example, that the Professor recommended Coleman's Wincarnis, which he analysed and glowingly testimonialised as follows:—

REPORT OF AN ANALYSIS OF COLEMAN'S LIEBIG'S EXTRACT OF MEAT AND MALT WINE.

By Charles R. C. Tichborne, L.L.D., F.C.S., L.A.H.I., Fellow of the Institute of Chemistry: Lecturer on Chemistry, Carmichael College of Medicine; Chemist to the Apothecaries' Hall of Ireland; Analyst to the County of Longford, etc.

“15, NORTH GREAT GEORGE'S-STREET, DUBLIN,

Date of Report, August 13th, 1888.

“I have made a careful examination of Coleman's Liebig's Extract of Meat and Malt Wine, and I can certify that it is a preparation having the exact composition described by Messrs. Coleman & Co.'s advertisements; that is to say, it is a mixture of Port Wine, Liebig's Extract of Meat, and Malt Extract.

“I can certify that it contains the above ingredients, including a considerable quantity of solid nitrogenous products of the same nature as found in Liebig's Extract of Meat.

“It is extremely palatable, a very important point when we consider the special cases where this preparation is likely to be used.

“Coleman's wine must be a powerful restorative, as it consists of a mild alcoholic stimulant combined with the extracts representing a mixed diet of cereals and meat in a concentrated form.

“I have no doubt that it will be found invaluable where such a diet is required in this concentrated form, and yet capable of easy assimilation.

(Signed) “CHARLES R. C. TICHBORNE.”

Such a recommendation, if adopted, might produce the most fatal consequences, the result of our Analyst's examination being as follows:—

“I hereby certify that I have received a sample of Coleman's Wincarnis from the Editor of FOOD AND SANITATION, and that I have carefully analysed the sample. I find that it yields, as the result of two closely agreeing analyses, 0.087 and 0.082 per cent. of total nitrogen. The sample is, therefore, practically well nigh devoid of extract of meat.

“THE CONSULTING ANALYST.”

Our second objection is to the abuse of the Royal Irish Con-

stabulary, we cannot endorse this, for the reason that the only persons in Ireland who are doing one bit of real useful public work for that country are the members of the Royal Irish Constabulary. Acting upon our suggestions, they have been instructed to take samples of food stuffs, and suppress adulteration in Ireland. The results of the admirable work they are doing is shown in the better repute Irish butter is gradually gaining and in the slowly increasing demand for it. Excess water and other swindles had well nigh ruined what, under a sensible business direction, should be an industry of five times its present proportions. The greed and rascality of a few was causing Irish butter to lose market after market. The Royal Irish Constabulary merit the thanks of every one who has at heart the well-being and development of Irish industries for the activity they are showing in rooting out the water in butter swindle. Altogether these resolutions have afforded us a hearty laugh, especially the portion referring to the Analyst of Somerset House as the highest authority in the country. We hope the resolving gentleman who is, we observe, a J.P., is not so shaky in his legal sentences as in his written ones.

WHY COFFEE DRINKING DECREASES.

Two prosecutions at Kesteven Petty Sessions, on September 29th, ought to be instructive to coffee importers. In one case,

Mr. Robert Hanson, grocer, Thorpe-on-the-Hill, was summoned for selling coffee adulterated with 70 per cent. of chicory. Police-constable DeCann deposed to visiting the defendant's shop on the 5th ult. He asked for a quarter of a pound of coffee, for which he paid 4d. After making the purchase, witness read over to the defendant the usual notice, and he then replied, “That's chicory and coffee.” Witness said he had bought coffee, and expected it was such. He then divided the coffee in the usual manner, leaving one portion with the defendant. The Chairman: The coffee ought to be pure. Defendant: Not at 1d. per ounce. That is a cheap kind we sell; we cannot sell pure coffee at that price. When customers ask for an ounce of coffee at that price they know they are not getting it pure. The Chairman: You are very much to blame for not having it properly labelled. Defendant: I cannot afford labels. The Chairman: You can write it on the papers. You will be fined 7s. including costs.

There is little wonder that the taste for coffee drinking is declining when 70 per cent. of chicory and 30 per cent. coffee is sold at 1d. per ounce, and Magistrates encourage such practices by paltry 7s. fines. The Magistrates who thus showed their unfitness for their positions actually punished the County Council for enforcing the adulteration Acts, for the reason that the costs of the analysis and summons would be far greater than the total fine. But the following case is even worse as regards penalty, although in this instance the shopkeeper had the decency not to charge 1s. 4d. per pound for trash misnamed coffee.

At the Kesteven Petty Sessions, John Marshall, grocer, Eagle, was summoned for selling coffee adulterated with 70 per cent. of chicory, on the 5th ult. Police-constable DeCann deposed to purchasing the coffee from the defendant's wife. He got a quarter of a pound for 3d. When he told her what he wanted it for she shouted to her husband, “Here's another catch come.” Defendant said the tin in which she kept the mixture was labelled “chicory and coffee,” and she pointed that out to the police officer after he told her he wanted the coffee for analysis. A fine of 2s., including costs, was imposed, the Bench not considering the offence a very serious one.

This is surely a disgraceful exhibition of magisterial incapacity, and more likely than not its perpetrators are country gentlemen landowners, who whine and moan that farming doesn't pay, that foreign butter and margarine usurps our markets thrusting out English produce; idlers who snivel to Parliament that margarine should be coloured pink or green that they may the better sell English produce which they do not take the trouble to make as clean or as healthy as Dutch margarine. When we began our journal we felt a keen sympathy for the English landowner. A fourteen months' experience of his stupidity as a Magistrate, his ignorance of any useful question that would benefit his country or his class, his idle useless life spent in chasing something, in shooting something, or gorging himself, has considerably dulled the edge of the pity we felt. In place of being the man of real education, of ideas, of business aptitude, leavening with greater intelligence his less fortunate tenants, promoting new industries, where old ones are dying, or are worked at a loss, he is with a few exceptions, an unmitigated curse to his country and to those over whom he wields a power for which he has no atom of fitness.

WARNING TO GROCERS.

Buy no vinegars that are not advertised in FOOD AND SANITATION. No matter how specious the promises, resist any inducements to deal with firms whose announcements do not appear in this Journal. You will then avoid prosecutions, convictions, loss of time, money, repute, and business.

October 14, 1893.

FOOD AND SANITATION.

COOKED OX TONGUES,

In Tins of $1\frac{1}{2}$, 2, $2\frac{1}{4}$, $2\frac{1}{2}$, 3, and $3\frac{1}{2}$, lbs.

PACKED BY

Fairbank Canning Company,
CHICAGO.

MILD

CURED.



CHOICEST

FLAVOUR.

Invaluable for Race, Pic Nic, Yachting
and Boating Parties.

TO BE OBTAINED WHOLESALE OF THE IMPORTERS,

MORRIS BEEF COMPANY,
LIMITED.

MONUMENT YARD CHAMBERS, LONDON, E.C.

A SEVERE LESSON FOR MR. PLOWDEN.

Hanley may congratulate itself upon having—so far as knowledge of the Adulteration Acts is concerned, and capacity to see through the wiles of the milk and water man—by far the most capable Stipendiary Magistrate in England. The thorough manner in which Mr. Wright dealt with the acetic acid swindle squelched it effectually. He has shown by the following case that the “yarn about the eight per cent. water cows” will have to possess more substantial support than it had before Mr. Plowden, or it will not upset fact and common sense at Hanley. Mr. Wright’s remarks will prove painful reading for those striving to work the eight per cent. water game in Hanley.

On Oct. 2nd, William Henry Walton, farmer, Endon, was summoned at the instance of the Town Council for selling adulterated milk. Mr. A. Challinor, Town Clerk, prosecuted, and Mr. Ashmall appeared for the defence. It was stated that a sample of milk was purchased from the defendant’s servant, who was vending it in Ashford-street, Shelton. The certificate of the Public Analyst stated that the sample contained 15 per cent. of added water. It transpired that the bottle containing the sample was not sealed, but was placed in a canvas bag upon which the seal was placed. In these circumstances Mr. Ashmall contended that the Act had not been complied with. The Town Clerk contended that it was not absolutely necessary to seal the sample, as the words of the Act were “seal or fasten.” The objection was overruled. Mr. Ashmall quoted a case heard at Marylebone Police-court, in which a dairyman was charged with a similar offence. The certificate of Professor Stokes was to the effect that the sample of the defendant’s milk contained 6 or 7 per cent. of added water; but evidence was given by Mr. Lloyd, an Analyst, to the effect that he had seen seventeen of the defendant’s cows milked in a field, had seen all the milk put in a large churn, and found a sample taken from this to contain upon analysis 8 per cent. of water. His explanation was, that the exceptionally hot and dry season which had been experienced had so affected the food of the cows as to cause the quality of the milk to fall below the usual standard. Mr. Ashmall said this case was precisely similar to the one he had quoted, and he could call evidence to show that from the time the milk came from the cows to the time the sample was taken by the inspector no water had been added to it. He pointed out that the question involved in this matter was becoming so serious that many dairy associations had taken it up, and only the other day the Cheshire Dairy Association had decided to memorialise the Home Secretary to reduce the present standard, because farmers found it utterly impossible to invariably produce milk up to it. The Stipendiary said the proper course would have been to have brought the Analyst to the court for cross-examination. Mr. Ashmall said that would entail very serious expense. The Stipendiary said the case was one of great importance. Mr. Ashmall concurred in this, and expressed a hope that the farmers and milk-sellers of the district would combine to take the matter up. Evidence was then adduced to show that no water whatever had been added to the milk, but the Stipendiary intimated that he had decided to convict. In future cases, unless notice was given that the Analyst’s certificate would be contested he should not allow evidence of the kind which had just been given. For the future, if the Analyst was not placed in the box he should take, as the Act required him to do, the Analyst’s certificate as conclusive. Mr. Ashmall: It is merely a question of expense. The Stipendiary: It is a matter of importance in which the farmers of the district may club together to take up a case.—Matthew Udall, milk-seller, Oak-street, Hanley, was also summoned for selling milk to which the Analyst certified that at least 8 per cent. of water had been added. Mr. Ashmall, for the defence, submitted that the milk was sold to the Inspector in exactly the same condition as it was received from Mr. Warner, farmer, Birches Head.—Daniel Heath, milk-seller, Rose-street, Northwood, was charged with a similar offence, and in this case the Public Analyst’s certificate stated that the milk was adulterated to the extent of at least 8 per cent. with added water.—Louisa Smith, milk-seller, Broad-street, Hanley, was charged with selling adulterated milk. Mr. Challinor prosecuted; and Mr. Moxon appeared for the defence. It was certified by the Analyst that the milk contained added water to the extent of 10 per cent. The Inspector who purchased the sample admitted that he had not seen the defendant’s servant, from whom he obtained it, selling any milk, though she appeared to be delivering it at various houses. Mr. Moxon contended that to comply with the Act the Inspector must see the milk actually exposed for sale before he could demand a sample. The objection, however, was overruled. It was stated that the defendant sold the milk exactly as she received it from a farmer at Milton. In the case of Walton, the Stipendiary said the offence was a distinctly bad one, and he imposed a fine of £10 and 14s. costs. Udall, who had been previously convicted, was fined £5 and 11s. 6d. costs, the Stipendiary remarking that if defendant sold the milk as he received it from the farmer he could recover the amount of the penalty from the latter. The defendants, Heath and Smith, were each fined £2 10s. and 9s. costs.

If there were more magistrates like Mr. Wright, there would be less plunder of the farmers, and public, and less unhealthy, rickety, half-starved babies.

If your advertisement is not in FOOD AND SANITATION do you know what people say? That your articles are not pure and they avoid them.

THE GILLINGHAM DAIRY COMPANY HAD BETTER POLEAXE “LLOYDS’ COWS.”

At Salisbury Petty Sessions, Edmund Henry Grey, dairyman, of High-street, was summoned for having on the 6th September sold a quantity of milk adulterated with 10 per cent. of water. Mr. Nodder, who appeared for the defence, stated that the defendant bought the milk in question of the Gillingham Dairy Company, and that he sold it in the same state in which he received it. The defendant and the Dairy Company contended that the poorness of the milk was due to the drought and not to the adding of water. The defendant produced an agreement with the Gillingham Dairy Company to supply him with pure milk from May last. Mr. Nodder admitted that a general warranty was not sufficient in such a case. Mr. Nurse, foreman to the Gillingham Dairy Company, stated that the milk was supplied to the defendant in exactly the same state as witness received it from the farmer. He had had three or four samples of milk direct from the cow analysed, and found it returned as containing in some cases seven per cent. of water. The milk generally during the past dry season had been very poor. Supt. Mathews, who produced the City Analyst’s certificate, stated that these proceedings were taken under the Food and Drugs Act. He had purchased samples of the defendant’s milk on two occasions before prosecuting. On the first occasion it was adulterated with 11 per cent. of water. Fined £2 with costs.

DISGRACEFUL SOUTHPORT.

We have a great respect for Dr. Vernon, Medical Officer of Health for Southport. He is earnest and able, and, had he the opportunity, the scandalous non-enforcement of the Food and Drugs Acts in that town would not have been; but with a Town Council composed largely of shopkeepers, and with the existing conditions under which all concerned in Sanitary work hold their appointments, no matter how earnest an officer may be, he is powerless. Dr. Vernon takes us to task as follows for our strictures upon Southport:—

To the EDITOR of FOOD AND SANITATION
Town Hall, Southport,

October 2nd, 1893.

SIR,—The hard words you indulge in about Southport are not very material, and will not probably do us much harm, but your facts not being all correct, I ask for an opportunity of putting them right. As regards your statement that no food stuffs are taken for analysis here, you are a little behind the day. We have a Borough Analyst, and we have taken samples. It is true that we have been without an Analyst since Mr. Holland resigned, until lately, and it is equally true that we were not anxious to advertise that we were proposing to start on the war path. I am afraid your somewhat vigorous “war-whoop” will act more as a danger signal to the evil-doers, than suits our book. As regards our so-called “sewer-gas destroyers,” allow me to say that there has been no quarrel between a couple of sub-committee’s about gas. The provision for gas in the ventilating shafts has been unused, because in the opinion of the Health Committee there was a sufficient current in the ventilating shafts without the gas. The alleged quarrel about gas is a pure invention; a figment of the vivid imagination of a person wholly destitute of information. As for “German” shrimps in Southport, those also are as non-existent as the invented quarrel. There are at times, when Southport shrimps run scarce, a quantity of “Dutch” shrimps imported. In cool weather these can be delivered perfectly sweet here without any chemicals but common salt. Instead of being a week on the way, they can get here in two days—or three at the most. In warmer weather they are treated with “glacialine,” which I don’t admit, but this is no worse than the borax preserved herrings from Norway, to which the general public, at any rate, does not object. Whether Dutch shrimps are palmed off upon the public as Southport shrimps or not at times I am not prepared to say, but I do know that in the case you name the shrimps were not Dutch, but Southport shrimps. That there is something not yet explained about these shrimp cases is pretty obvious, for no one who partook of them has alleged that they were unpleasant to taste or smell. Your reference to Worthing is founded on no real parallel. Our water supply comes from shafts sunk in the new red-sandstone, eight miles away from our sewers—not from neighbouring ground where sewers and well alike traverse a porous bed of chalk. There were no particular stinks at Worthing. As for “frightful smells” and “worse evils,” permit me to say that sewers do not usually nor habitually contain anything but excreta and other organic matter, tending in hot weather to rapid decomposition. Moreover, pathogenic bacilli do not necessarily stink. Our death-rate from all causes this year, to September 30th, is only 16 per 1,000, and our zymotic death-rate 1 per 1,000. For years past our zymotic death-rate has only averaged 1 per 1,000—or rather less. If we are in a “parlous case” these figures at any rate don’t show it.

I am, yours obediently,

HENRY H. VERNON, M.D., and F.R.S.E., Medical Officer of Health.

We do not desire to do Southport harm, but we do desire that Acts for the public protection should be enforced. Much as we respect Dr. Vernon, we respect our own reputation for truth more. Now, let us see what food stuffs are taken for analysis, and what has been done in this way at Southport prior to our strictures. The Local Government Board issue a yearly report, and every authority having an analyst must supply returns for that report. On page 21 of the report for 1891 to 1892 South-

port is returned as having examined no samples. On page 23 of the report for the previous year the honest trader selling genuine articles has had no chance at Southport—no samples whatever having been analysed. In the previous year one sample was analyzed for a population of 32,206 people. In the year 1888 no samples were examined, and in the year 1887, two samples, showing a total of three samples in five years. If Southport is now proposing a vigorous campaign, we are gratified, but that it proposes such action is due more to our exposures than to any real spontaneous will on the part of its jobbing Town Council. As regards the gas question, the Southport press and members of the Committees in question, have said what we said, but on this point we accept Dr. Vernon's correction, as he ought to know better than we do, and be more accurate than the Southport press, and members of the Committees, who we suppose must have dreamed the quarrel. Whether the shrimps coming to Southport, and dosed or not with drugs as preservatives, come from Holland or Germany is a mere quibble. They are foreign in any case, and should be sold as such. If the public do not object to horaxed herrings from Norway, it is because the public do not know the herrings are drugged. The French Government, the German Government, and, we believe, the Norwegian Government itself, do not allow such drugged herrings to be sold for home consumption. To put it plainly, the French, German, or Norwegian food dealer is not allowed to drug his own countrymen without their knowledge, but, thanks to our Government asses, he can do what he likes to Englishmen in the way of food drugging. We are glad Dr. Vernon does not admire the practice. If the shrimps that produced the poisoning were Southport ones, then so much the worse for Southport. That Southport's water supply is good we willingly admit; but that the sewers are thoroughly satisfactory, we do not admit. It is very reassuring to know that the death rate is so low, but it does not abate the annoyance and discomfort experienced by those who have occasion to traverse the main thoroughfares, and experience the nausea and faintness caused by the frightful stinks to which we have called attention. If the sewers are badly laid, the fall too little, and the flushing improperly performed, it

is the duty of the Corporation to remedy it. We sympathise with Dr. Vernon in what must be a position of the greatest difficulty. We have had experience of corrupt jobbing Vestries and Town Councils, and although Dr. Vernon does not admit that he has to deal with such, those who know the type of gentry who are rulers in Southport can guess how hard and thankless must be the task of an earnest, able health officer.

CORRESPONDENCE.

To the Editor of FOOD AND SANITATION.

SIR,—To some extent I agree with you in your comment on "Incorrect Summonses." It is, indeed, a great pity that such grave mistakes arise among Sanitary Inspectors in the execution of the Sale of Food and Drugs Acts, and as the duties of the Sanitary Inspector embraces so many subjects, it is no doubt a difficult matter for the examiners of the Sanitary Institute to deal with this matter more fully.

But is the Sanitary Inspector altogether to blame for such mistakes as those you refer to in your issue of the 30th ult.? Is it not rather the fault of their legal representative? For I presume that all legal proceedings in connection with Local Boards or Vestries are (like my own) under the supervision of the clerks.

I happen to be one of those unfortunate Sanitary Inspectors, "Charged with the execution of the Sale of Food and Drugs Acts," and charged with the execution of the 101 other duties in connection with that office; but hitherto we have been very successful in our proceedings under the Adulteration Acts, the credit (if any) being justly due to the abilities of the clerk.

I am of opinion that Sanitary Inspectors should have power to procure samples of food for analysis (especially milk), but it is high time that more care was exercised in appointing men who have had some practical experience in this particular branch of the work under an efficient officer.

There should also be a special examination to qualify men for the duties of a Food and Drugs Inspector. The officer should know how to procure samples strictly in accordance with the Statute, but he is not expected to suggest to the Analyst the proper mode of issuing certificates, or his legal adviser, whose profession at least should make it impossible for such mistakes to occur.—Yours faithfully,
October 3rd., 1893. J. H. O.

GUARANTEED ABSOLUTELY PURE.

Warranted to stand any Analytical test. A natural product ensuring perfect digestion not possible in the various manufactured Acetic compounds

SICILIAN WINE VINEGAR.

Can be supplied in bulk.

Write for Samples and Price to Sole Proprietors:—
72, Mark Lane, London, E.C.

READ & DIGHT.

POWELL'S BALSAM OF ANISEED—FOR COUGHS.

Powell's Balsam of Aniseed—Coughs and Asthma.
Powell's Balsam of Aniseed—Coughs and Bronchitis.
Powell's Balsam of Aniseed—Coughs and Hoarseness.
Powell's Balsam of Aniseed—Coughs and Lung Troubles.
Powell's Balsam of Aniseed—Coughs.—Safe and Reliable.
Powell's Balsam of Aniseed—Coughs.—Established 1824.
Powell's Balsam of Aniseed—Coughs.—Refuse Imitations.
Powell's Balsam of Aniseed—Coughs.—Sold by Chemists.
Powell's Balsam of Aniseed—Coughs, Night Cough, Influenza.
Powell's Balsam of Aniseed—Coughs Relieved Instantly.
Powell's Balsam of Aniseed—Coughs.—The Oldest Remedy.
Powell's Balsam of Aniseed—Coughs.—Trade Mark.
Powell's Balsam of Aniseed—Lion, Net, and Mouse.
Powell's Balsam of Aniseed—1s. 1½d., 2s. 3d.

J. TRAVERS & SONS, Ltd.,

119, CANNON STREET, LONDON, E.C.,

WHOLESALE GROCERS, SPICE GRINDERS, &c.

SPECIALITIES IN PACKED GOODS.

"SHIP" BRAND FIRST QUALITY CANNED FRUITS, MEAT, FISH, &c,
"PENGUIN" BRAND SALMON.
"FOUNTAIN" BRAND SALMON.
"OPOSSUM" BRAND TOMATOES.

TOBACCO PEPPER. SAUCE.
GROUND SPICES. CURRIE POWDER.
FLOUR. MAIZE. MEAL. HOMINY.
OATMEAL.
Æ LEAD.

SOLE AGENTS for THURBER'S & GODILLOT'S CANNED & OTHER GOODS.

GRIMBLE'S MALT VINEGAR

Guaranteed BREWED and free from ANY ADDED ACIDS.

GRIMBLE & Co., Limited, Cumberland Market, London, N.W.

THE MOST POWERFUL DISINFECTANTS OF THE PRESENT DAY ARE

HIGHLY CONCENTRATED AND
SPECIALLY PREPARED FOR

Hospitals, Surgeries,
Asylums,
Local Boards,
Workhouses, Schools.



In 1, 5, or 10 Gallon
Iron Drums
(for Large Public In-
stitutions).

Larger Quantities specially
quoted for.

Write for Samples
and Prices to

Whalley's Sanitary Fluid Co., 56 & 57, Aldermanbury, London, E.C.

MALT VINEGARS.

WE guarantee all the Vinegars we are sending out to be brewed from MALT and BARLEY only—without the addition of RICE, MOLASSES or SUGAR—and that no description of ACID is used in the production of our Vinegars.

Brewery, Birmingham.

FARDON'S VINEGAR Co., Limited.

EDWARDS' DESICCATED SOUP.
IN FOUR VARIETIES.

BROWN—Beef and carefully selected garden Vegetables.

GRAVINA—EDWARDS' Gravy Powder.

WHITE (VEGETABLE)—A purely Vegetable Preparation.

TOMATO—Containing all the valuable, agreeable, and health-giving properties of the fresh tomato, perfect and unimpaired.

Sold by all Grocers, &c.

Cookery Book, post free.

SOLE MANUFACTURERS—

FREDK. KING & CO., Ltd., 3-6, CAMOMILE STREET, LONDON, E.C.

BANCROFT'S LARD.

BOAR'S HEAD BRAND.

ABSOLUTELY PURE.

We guarantee our Lard to be perfectly free from water or any other adulteration. We only make ONE quality, viz. :—

ABSOLUTELY PURE LARD.

BANCROFT & CO., Ltd., Lard Refiners, LIVERPOOL.



SLEE, SLEE & Co.,
Makers of
Pure Malt Vinegar.

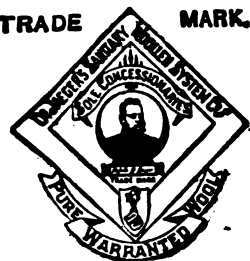
LONDON.

ESTABLISHED 1812.

TESTED FOR PURITY NON-SHRINKING AND STRENGTH

Protection from Chill in all Climates.

TRADE MARK.

**JAEGER PURE WOOL CLOTHING.**

The Best is the Cheapest!
Fixed, moderate prices for first quality.

The "JAEGER" Goods are tested for Purity in the Company's own Laboratory and Guaranteed by this Trade Mark, without which none are genuine.

Dr. Jaeger's "Health Culture," and Jaeger Company's Price List, sent free on application.

WEST-END JAEGER DEPOTS:

8 & 4, PRINCES STREET, CAVENDISH SQUARE (near Regent Circus).
 128, REGENT STREET (near the Quadrant).
 30, SLOANE STREET (adjoining McPherson's Gymnasium).
 456, STRAND (near Trafalgar Square).

CITY JAEGER DEPOTS:

85 and 86, CHEAPSIDE (near King Street).
 158, FENCHURCH STREET (near Lime Street).
 42 and 43, FORE STREET (near Moorgate Street Station).

BOVRIL

Contains in an

EASILY DIGESTIBLE FORM
 the **ALBUMEN** and **FIBRIN**,
 the **NUTRITIOUS CONSTITU-**
ENTS of PRIME OX BEEF.

BOVRIL, Ltd.,*Food Specialists,***LONDON.**

Directors { Rt. Hon. LORD PLAYFAIR, K.C.B., LL.D.
 { ROBT. FARQUHARSON, Esq., M.D., M.P.,
 &c., &c.

DISINFECTION WITH 'SANITAS.'

A very careful investigation just made by Dr. A. B. GRIFFITHS proves that "**SANITAS**" **DISINFECTANTS**, readily kill all Disease Germs, including the Microbes that cause

CHOLERA, FEVERS & DIPHTHERIA.**"SANITAS" DISINFECTANTS**

are Fragrant, Non-poisonous, and do not stain. They embody all the healthful principles of Pine and Eucalyptus Forests, and are the best for general use.

Copies of Dr. GRIFFITHS' REPORT, together with full particulars of

"SANITAS" DISINFECTANTS & "SANITAS" APPLIANCES

Will be sent free on application to

The "SANITAS" Company, Lim., Bethnal Green,
LONDON, E.

CALVERT'S CARBOLIC OINTMENT,

Larger Pots, 13d. each, with full Instructions.

Court Circular says: "We cannot too highly recommend Calvert's Ointment. It is the best general Ointment with which we are familiar, and ought to be a stock remedy in every household."

Private report from Limassol Cyprus: "I have never found anything to come up to it for neuralgic 'Rheumatic Pains.'"

Samples sent Free by Post on receipt of value.

F. C. CALVERT & CO., MANCHESTER.
 Awarded 60 Gold and Silver Medals and Diplomas.

True Reciprocity!

Or how to make

HAPPY ENGLISH HOMES.

If all Smokers of
American Manufactured
 Cigarettes were
 to smoke our

"Silver Veil,"

or other English Brand,
 employment would be
 afforded to Thousands
 of respectable and de-
 serving English Girls,
 besides a large amount
 of additional adult labor.

Why support the pro-
 duct of a country which
 brags of its McKinley
 Tariff Bill, introduced to
 devastate English manu-
 factories.

Why not, rather,
 smoke Cigarettes made
 out of precisely the
 same Tobacco, but
 rolled in English Factor-
 ies by English Girls,
 and pay back in its own
 coin **Grab-all Yankee-**
ism.

Ogden's Factories,
 Liverpool.

Food and Sanitation.

SATURDAY, OCTOBER 21, 1893.

RETAILERS, BEWARE OF YEAST ADULTERATION.

In our issue of August 12th, we called the attention of grocers, bakers, and others to some cases of yeast adulteration, saying, in a paragraph headed:—

"GERMAN AND DUTCH YEAST SWINDLES,"

"The myriad forms adulteration takes are as bewildering as they are unsuspected by the ordinary consumer. When detected, however, and grocers have their attention called to the fact that dangers lie in selling certain classes of goods, the retailer is a fool who does not take precautions to avoid the danger of prosecution. We therefore desire to call the attention of grocers to the fact that there is great risk run in selling the Dutch and German yeast at present offered to the trade. In another column our readers will find a report of a prosecution for Dutch yeast adulterated with 50 per cent. of farina. In this instance the penalty was small. It is scarcely likely to be so in future cases. Readers who took our advice re acetic acid as vinegar have cause for thankfulness. They will have equal cause for congratulation if they avoid farina in Dutch yeast."

The generic use of the term Dutch Yeast, to describe yeast, whether of French, German, Dutch or English make, and the fact that the yeast in question was called Dutch by the magistrate in the case as reported, led us to assume that it was Dutch yeast, and to warn retailers against dealing in Dutch yeast. Since then, by the courtesy of the Yeast Union Schiedam, we have been enabled to satisfy ourselves that whatever may have been the origin of the adulterated yeast it was certainly not a portion of any yeast sent to England by the body of merchants who form the important Yeast Union of Schiedam, and who

control the bulk of the Dutch yeast that comes into the English market. The manner in which the Yeast Union at Schiedam deal with adulteration is so thorough, practical and honest, that it is one that we would like to see copied by important associations concerned with home produce, such as the Trustees of the Cork Butter Market, for example. It is too much to hope that the gang of loafers and guzzlers—the Grocers Company of London—who have a yearly income of some £40,000, originally bequeathed for the benefit of the grocery trade and the suppression of adulteration in food stuffs, of which some £20,000 is thrown as a sop to different public purposes, in order that the rest may be jobbed by the disgraceful gang who form the Company, would do anything so honest or useful. They manage these things better in Holland—in fact, they manage most things better in that country. Our class of useless country gentlemen, who shoot or hunt, and live out of the ruin of their tenantry, is unknown in Holland, where every man is a business man, practical, educated, speaking three, four, or more languages, and knowing the markets of the world and their requirements. Twenty-five years ago—before our present Adulteration Acts were known—the far-sighted yeast makers of Schiedam set England an example, took adulteration by the horns, and formed a Union, the main purpose of which was to prevent the shipment of adulterated yeast to England. For twenty-five years, every shipment of yeast to England has been examined by officials appointed by that Union, and the samples have been analysed every morning at the Union's offices. Any member found shipping yeast that is adulterated has a heavy penalty inflicted upon him—no less a sum than £100—and through all these twenty-five years the Union has kept its records in books, showing the daily analyses made of yeast sent to England. It has thus come about that no country places such a large amount of pure unadulterated yeast of the highest quality upon the English market. The warning therefore in our issue of August 12th must not be taken as applying to yeast sent to England by the Schiedam Yeast Union, but only to that of makers who are not members of the Union. On another page of our present issue will be found a list of the names of the members of Yeast Union, Schiedam, who ship only pure yeast. There are firms outside the Yeast Union, who ship yeast from Holland and advertise it in trade journals as guaranteed unadulterated. It is the yeast of such outside firms that caused the prosecutions and our warnings. Samples of such yeast, guaranteed and advertised as unadulterated, that we have analysed have had percentages of adulteration of 10 to 25 per cent. English dealers, now that prosecutions for yeast adulteration are becoming more numerous, will need to exercise great caution in their purchases. They need not fear any trouble if they buy the yeast guaranteed by members of the Schiedam Yeast Union. They run the risk of loss of time, business, reputation, and what may be the ruin of their trade by an adulteration prosecution if they deal in other yeasts. The dealer who, knowing that yeast he buys cannot bring him trouble if he deals with any one of the members of the Yeast Union, purchases yeast manufactured by someone not a member of the Union, invites prosecution and disgrace, inasmuch as it is obvious that any firms who are not members of the Yeast Union, Schiedam, keep out of such membership for one reason only, viz., that they wish to practice adulteration, and reap the extra profit gained thereby. Unfortunately they are outside the reach of our English law, which falls upon their victims—the English shopkeeper. If, after this warning, and our publication of the list of firms who supply nothing but absolutely pure yeast, shopkeepers sell adulterated yeast, and are fined heavily, they will deserve scant sympathy, for it will be entirely their own fault.

CO-OPERATION AND VINEGAR FRAUDS.

William Dodds, manager of the Craghead Co-operative Stores, was charged with selling vinegar found to be adulterated to the extent of 50 per cent., supplied through Messrs. Johnson and Dodds, 20, Bigg Market, Newcastle. Defendant had given notice that he intended to produce a written warranty from Messrs. Johnson and Dodds that the article was invoiced to him as pure malt vinegar. As soon as that guarantee was proved, Mr. Iliff asked their Worshipships to dismiss the summons, and to impound the warranty, so that the County Council would be in a position to prosecute the proper parties, under another section of the Act. Evidence having been given by J. W. Wilson that he purchased the vinegar on the 15th of August, defendant produced the written warranty he had got from Messrs. Johnson and Dodds, Newcastle. The Magistrates, in view of the warranty produced, dismissed the summons.

If your Advertisement is not in "Food and Sanitation" do you know what people say?—That your articles are not pure, and they avoid them.

THE GOOD REFRESHMENT CONTRACTOR AND THE WICKED MILK PURVEYOR.

Following the convictions recorded in our last issue against Messrs. Bertram and Co., refreshment contractors, Earl's-court Exhibiting and elsewhere, the same firm were summoned at Southwark on the 12th charged with selling milk deficient to the extent of 45 per cent. a butter fat, without making disclosure of alteration of its quality required by the provisions of the ninth section of the Food and Drugs Act. Mr. Foord, solicitor, appeared for the Local Sanitary Authorities, and Mr. G. Lyon, barrister, was counsel for the defence. Evidence in support of the summons was given by the Sanitary Inspector of St. Olave, who stated that on the 14th of September he purchased a glass of milk at one of the refreshment bars at the London-bridge Railway Station, which, on being analysed, was found to be deficient of butter fat to the extent of 45 per cent., and was also found to contain minute portions of boracic acid. Mr. Kennedy (the Magistrate) asked if the witness knew what the boracic acid was intended for. Inspector Ashdown replied that he believed it was used as a preservative, to prevent the milk from getting sour. This completed the evidence for the prosecution. Mr. Lyon, for the defence, said that he had been compelled to advise his client that technically he had no answer to this summons, but he wished to bring before the Magistrate the facts of the case with a view of showing that, personally Mr. Bertram, whose character as a refreshment contractor, was well known, was in no way responsible for what had happened. The fact was that the Defendant obtained his milk from a contractor (Mr. Morrish) with whom he had been dealing for 15 years, and the terms of the contract were, that the supply should be of the best quality and the price paid was amply sufficient to enable him to do so. Unfortunately, the contractor had failed in this respect, and he (counsel) held in his hand an apology from Mr. Morrish for not having fulfilled the conditions of his contract. Under the provisions of the Act the defendant would have been exonerated had he obtained a written warranty from the contractor. His client was under the impression that the terms of the contract supplied that warranty, but he (counsel) had advised the defendant that this was insufficient, and that to protect himself a written warranty should be obtained from the vendor for each consignment. That question had been settled in the case of "Harris v. May," and also in the case of "Hodgkin v. Hindmarsh" 2 Q.B., p. 181, and, under these circumstances he (counsel) had no alternative but to advise his client to submit the case to the judgment of the Court, and to ask that due consideration should be given to the facts, as he had stated them. As a refreshment contractor of long standing and high reputation, the defendant felt very acutely the position in which he was placed, and counsel could only say on his behalf that the technical breach of the law which had been committed, was through no fault of the defendant himself. Mr. Kennedy said that the learned counsel had given the defendant very good advice, but as he had no written warrant he was not exempt from the penalties imposed by the statute. The defendant must suffer for the fault of the contractor, and he would be fined £5, and 12s. 6d. costs. On a second summons for a similar offence for milk sold at another refreshment bar at the same station, a nominal fine of £1 with costs was imposed.

Immediately following this case there appeared in the public press an apology from the farmer, Mr. Morrish, taking upon himself the blame for the fraud. Our readers, however, will remember that there were three offences in the Earl's-court case. In No. 8 arena bar the milk was found to contain 25 per cent. of added water. In No. 4 bar at the Bastille the milk was found to contain not only 25 per cent. of added water, but the fat was abstracted from it to the extent of 33 per cent. In No. 3 bar the milk was found to be same as in No. 4 bar. Now Mr. Morrish's apology puzzles us. Is it reasonable to suppose that, having apparently *carte blanche* to supply whatever quality of milk he chose to the exhibition he took the trouble to supply two kinds? We can scarcely think so. We also know the capacity of the Kensington Analyst too well to entertain for a moment the thought that he was incorrect in his analysis. How then did it come about that the milk in one bar showed no abstraction of the cream, and that the milk in the higher priced bars showed a deficiency of 33 per cent.? We would like some further explanations and to know if Messrs. Bertram and Co. purchased any special supplies of cream on the occasions of the Earl's Court and London Bridge Railway prosecutions, and if not from where the cream used for the public was obtained. It may not be the practice at Messrs. Bertram's bars, but it is to our personal knowledge a common practice of some large railway companies' managers to sneak the cream from the milk that comes from the milkman, and supply the public with the partially-skimmed product. We hope railway refreshment buffets throughout the country will come in for the attentions of Inspectors. They have for too long a period been neglected.

Do you want to avoid prosecutions for adulteration?

Read "FOOD AND SANITATION."

Send on your 6s. 6d. to the Publisher, 183, Strand, and get the journal post-free for a year.

SOMERSET HOUSE AND WATER ANALYSIS.

We have on a previous occasion felt it our duty to refer to the mischief done by the chemists at Somerset House, in presuming to give opinions upon samples of water submitted to them by public authorities, who from a superficial knowledge of the Food Acts are under the impression that Somerset House is the Court of Appeal for all things chemical and scientific. For instance, in No. 8 of this journal we referred to a case in which the Medical Officer of Health for the borough of Maidstone, Dr. M. A. Adams, had condemned the water-supply of two houses situated in Paradise-row, Maidstone. The water was from wells situated close to the closets, which had formerly been privies. The soil around the wells was saturated with the organic filth of generations. Dr. Adams stated "both these waters are greatly polluted, and neither can safely be used for drinking purposes, and they are likely to prove injurious to the health of persons drinking them." The owners of the wells appealed to Somerset House, and found in the chemists at Somerset House the protectors they doubtless expected, for a report came saying that "it was only an ordinary pollution," although diphtheria had caused death in the property supplied with the condemned water. Dr. Adams thereupon administered to the Somerset House chemists a castigation, which unless they are pachydermatous, they should have been unable to forget in a hurry.

But we see from the *Analyst* for October, that this lesson has not been sufficient, and that the Somerset House chemists have once more ventured to interfere with the activity of a local sanitary authority, and this at a time when cholera is within our gates, and strenuous efforts are necessary to put our houses into sanitary order. The case is told in a most calm and dispassionate manner by Mr. F. W. Stoddard, Public Analyst, of Bristol, as follows:—

"The water of a shallow well supplying a poor district in Bristol was found to yield very marked evidence of sewage pollution of the oxidised type common in similar situations, and action was taken by the sanitary authority to close the well. In view of considerable opposition, an independent opinion was considered advisable, and Mr. Hahner was requested to report on the water. His opinion coincided with that I have already expressed, namely, that the water was polluted with sewage and dangerous to health.

The well is situated at the foot of a mill-stone grit hill, composed of beds of rock dipping sharply at an angle of about 25 degrees. It is 45 feet deep and is not puddled, but built around with loose stone, uncemented. It is immediately surrounded by a nest of houses of a poor class, and is, indeed, placed beneath a small paved yard attached to one of the houses, the other end of the yard being occupied by a privy. Numerous drains, some of which have recently been defective, are known to exist within a few feet of the well, and there is an old graveyard at a distance of a few yards. The steep slope of the hill, and the whole of the table-land at its summit, are thickly inhabited, forming, indeed, a great part of Clifton; so that there is no possible gathering ground of a satisfactory description. The natural unpolluted water from this formation almost always yields less than 0.1 grain of nitrogen as nitrates per gallon. The hearing of the case was very prolonged, and ultimately the Bench decided to refer the matter to Somerset House. A sample was sent on June 4th, and after a fortnight's delay a series of questions as to the circumstances of the well was received; as the replies were necessarily in every case unfavourable to the water, it was naturally supposed that any doubts as to its polluted character would be dispelled. No report, however, was forthcoming, and only after repeated applications for some expression of opinion was a letter received containing a proposal that the matter should stand over until November. As the local Authority was intent upon setting its house in order in view of a possible cholera invasion, and as the evidence of pollution was quite conclusive, this proposal was naturally declined; and, finally, after further pressing, the following report, dated July 25th, was received on August 9th, a period of more than two months having elapsed since the sample was despatched. It will be noted that Dr. Bell's name, which headed the list of signatures in the previous correspondence, does not appear in connection with the report:—

"Laboratory, Somerset House.

"Judging from the figures shown under the terms of albuminoid, ammonia and oxygen absorbed, the water is regarded as of moderately good quality, and affords no evidence of serious contamination with organic impurities. The proportion of nitrates is high, but they are not in themselves injurious and do not indicate that the water has been exposed to recent sewage contamination. There are good grounds for believing, from the character and amount of the chief mineral matters contained in the water, that the great bulk of the water is derived from a deep or distant source, and that the well is not dependent for supplies from the soil of the immediate neighbourhood; for it would be reasonable to expect more definite evidence of present sewage contamination if leakage took place from the drain-pipes, which lie—it must be admitted—in almost dangerous proximity to the well.

Do you sell a genuine article? If so, Grocers won't believe you do if it is not advertised in

"FOOD AND SANITATION."

"Although this water is unsatisfactory in some respects, and we should not recommend it, we do not feel justified, from a consideration of the results of the analysis, in giving an opinion that the use of the water for potable purposes would be dangerous to health.

"As witness our hands this 25th day of July, 1893.

"(Signed)

"R. BANNISTER, F.I.C., F.C.S.

"G. LEWIN, F.I.C."

We wish to put this matter in a plain, common-sense light before the Local Government Board and our readers. We have here, on the one hand a man acquainted most intimately with the locality and with the character of the water of the neighbourhood, pure and polluted, backed up by the Medical Officer of Health, the Sanitary Authority, and an independent expert, in a demand to close a well containing 18 times as much nitric acid per gallon as is contained in the normal pure water from the strata in which this polluted well is situated. We have, on the other hand, two chemists, holding, it is true, official positions in Somerset House, but utterly unknown as water-experts, and who evidently do not even understand the principles of water-analysis and the deductions therefrom. The local chemist, too, has the all-important advantage of local knowledge; he sees the drains surrounding the well, the befouled yard around it, the collecting ground, incapable of yielding anything but polluted fluid, and without analysis at all would have been justified in condemning a well so situated. But the Somerset House prodigies state that the water may be continued to be consumed as a drinking water, because, indeed, nitrates are not in themselves injurious, although they found no less than 9.4 grains of nitric acid per gallon. No, Messrs. Bannister and Lewin, nitrates are not in themselves injurious, neither is free or albuminoid ammonia, nor chlorine, or any other matter set forth in a report on any drinking water. No one but a fool could ever have believed that they were. But they are when found in abnormal amount the chemical indication, to those who understand the meaning of figures, that the sample analysed is not water only, but water plus sewage. And no water has yet been found in England which contained 9.4 grains of nitric acid per gallon, unless such water was befouled with sewage or animal drainage. Chemistry is quite incapable of ascertaining whether such befouling took place "recently" or not as innumerable wells are fouled with sewage proceeding from privies and cesspools in the immediate neighbourhood of the wells, and yet the fluid in the wells shows only nitrates and no abnormal amount of free or albuminoid ammonia. It is impossible to find this out on the top-story of Somerset House, but every chemist who has actually inspected the wells from which he analyses his samples knows the fact full well. Coming after our exposure of a year ago, this case places Somerset House in a dangerous and antagonistic light as regards public health.

If the Somerset House chemists had a spark of scientific honesty in them, they would, on receiving a sample of water from any public authority acting on the erroneous impression that Somerset House is a Court of Appeal on sanitary matters, return the sample with a polite intimation that it is not their business, nor have they the knowledge to deal with such matters. No one would think any the less of them for such a course of action, as not even a Government analytical department can be expected to know everything, and for some time to come the Somerset House chemists will still be usefully employed in acquiring the principles of food analysis, of which, under the Food Act 1875, they were made the exponents. It is no disgrace to any man to be ignorant, and to confess himself so, on any matter outside his training and life-work; but it is a disgrace to assume a knowledge and wisdom where there is none. The difference between a man who only speaks of what he knows, and the one who professes to know what he does not, is that of the scientific man and the vulgar quack. The scientific world knows which role Somerset House assumes. It is time the Local Government Board knew it also.

THIS FIRM DID NOT TAKE OUR ADVICE.

At Stafford, on October 12th, Thomas Bunn, manager for Ball and Co., grocers and provision dealers, Greengate-street, was charged under the Food and Drugs Act with selling, to the prejudice of the purchaser, a pint of malt vinegar which was adulterated with 50 per cent. of acetic acid. Mr. W. H. W. Knight prosecuted, and Mr. F. W. Thompson defended. Mr. Gifford, in the employ of the prosecutor, said on September 2nd he purchased a pint of malt vinegar, for which he paid 8d. The Analyst's certificate showed that the article contained 50 per cent. of acetic acid. Mr. Thompson, for the defence said his client had bought the vinegar from one of the largest vinegar firms in the country, and paid 11d. per gallon for it. The Bench ordered defendant to pay the costs.

NOTICE TO SUBSCRIBERS.

Index to Volumes I. and II. is now ready, price 1s. Volumes I. and II., bound in cloth, gold lettered, with index complete, 7s. 6d. each, carriage paid. Postal Orders to be made payable to the Publisher, FOOD AND SANITATION, 183, Strand.

THE PHARMACEUTICAL SOCIETY AND RETAIL GROCERS.

Our outspoken, and, we venture to say, unanswerable exposure of the real aims of the Pharmaceutical Society in the prosecutions it has instituted throughout the length and breadth of England to intimidate grocers from vending patent medicines has brought us a shoal of letters from grocers and chemists. Those from grocers, without exception, thank us for being the one newspaper that has really put the point plainly before the public, viz., "That a patent preparation is just as poisonous when sold by a chemist as by a grocer, and that it is not regard for the public safety, but greed for a profitable monopoly that has inspired these prosecutions." Amongst the protests sent us by chemists, there is an indignant denial that the chemist is an interloper upon the medical profession. How much is that denial worth? We have before us as we write a case proving our contention to the hilt.

It is the report of an inquest, held at Lambeth, on Friday, the 13th inst.—"By Mr. Braxton Hicks, Coroner, with reference to the death of Horace Edgar Arthur Denbigh Graham, aged five months, son of a labourer, living at 7, Ward-street, Lambeth, who died on the 8th inst. Rose Graham, the mother, stated that after the birth of the child she suffered from erysipelas, and with her child went into the Lambeth Infirmary, remaining there until the 6th inst. On the following day the baby was seized with sickness and diarrhoea, and her husband took it to Mr. Douglas, a chemist in Lambeth-walk, who prescribed a powder and medicine. He also took it there on Sunday evening, and the child died at 8 o'clock, having had the diarrhoea all the time. Denbigh Graham, the husband, said he asked the chemist what was the matter with the child, and told him it had had diarrhoea and sickness. The chemist examined the baby, and gave him some medicine and a powder, also a packet of infant's food. Next evening, the child being worse, witness again visited the chemist, who then advised him to take it to a doctor. The Coroner: Yes, the child was then practically dying. Mr. John Henry Hunt Douglas, of 164, Lambeth-walk, said he was a son of Mr. J. S. Douglas, a dispensing chemist. The Coroner: He is not registered. That is a mistake. I am not a qualified chemist. When I told Graham on the Saturday to take the child to a doctor he did not answer, and it being late I prescribed for it. But you are not qualified? We are allowed to prescribe. The Coroner: I don't know that you are. It is very often more by luck than anything else that the proper drugs are given. Dr. John Wood ascribed the cause of death to collapse from diarrhoea and vomiting, due to improper feeding. It was deeply to be regretted, the witness added, that the child was not taken to a doctor instead of a chemist, whose duty it was to dispense and not to prescribe. Calomel, which was one of the drugs prescribed, was an improper thing, and the chemist either diagnosed the case wrongly or neglected to examine the child. The Coroner strongly animadverted on the "reprehensible" conduct of chemists in prescribing for children, and said such cases as these should act as a warning to poor people. The jury returned a verdict in accordance with the medical evidence, and expressed their opinion that the death was accelerated by the wrong treatment, and that the chemist was deserving of censure. They also asked the Coroner to report the case to the Pharmaceutical Society. The Coroner, in conveying the censure to Mr. Douglas, said it referred to the whole establishment.

So intolerable has this scandal become of the chemist assuming the functions of the medical man that we could point to a dozen or more testimonials giving opinions that should only be given by a medical man as to foods, &c., but which are issued by shining lights of the Pharmaceutical Society. So universal has the practice become of the keeper of a pharmacy shop "sweating and blacklegging" the medical man, that we have in the current issue of the *British Medical Journal* a correspondent writing upon prescribing chemists, saying:—

"Sir,—There has been a good deal in the medical papers lately about the commercial injury done the regular diplomaed practitioners by unqualified assistants and quacks. But, sir, no attention has been called to a form of unqualified practice which is a great deal commoner, on a much larger scale, and a much more constant quantity, than is the practice of the two classes usually singled out for anathema. I refer to the prescribing done by chemists over the counter—yes, and sometimes not done over or behind the counter, but in the form of a regular round of visits. I believe that the chemists of any average town treat ten times the number of cases dealt with by unqualified practitioners, and in many towns do larger practices than many medical men. In many chemists' shops you cannot stand ten minutes without two or three people having low-voiced conversations with the proprietor, followed by directions from him to the assistant. The poor people even often speak of chemists as Dr. So-and-so. These shops are really dispensaries, and the sooner we recognise the fact and take steps to protect ourselves the better. If you stop one unqualified practitioner, stop all.—I am, etc.,
"HONOUR WITHOUT PROFIT."

WARNING TO GROCERS.

Buy no vinegars that are not advertised in FOOD AND SANITATION. No matter how specious the promises, resist any inducements to deal with firms whose announcements do not appear in this Journal. You will then avoid prosecutions, convictions, loss of time, money, reputation, and business.

So much for our critics and their denials. We do not support the claim of the grocer to sell poisons indiscriminately. What we object to is the absurd contention that the sale of a patent preparation of the constituents of which the keeper of a chemist's shop knows no more than does the keeper of a grocer's shop is any less dangerous when sold by a chemist than if sold by the grocer. Loose preparations of poison stand in different case. Here the chemist knows the article, its properties and its dangers, but how many keepers of chemists' shops know the constituents of the myriad of patent preparations they vend? We venture to say that scarcely one in a thousand knows or cares. If the majority of the hair-lotions, syrups, extracts, tinctures, and what not, be the most bare-faced of swindles, does the chemist explain such to his customers? Not at all. He is concerned solely to sell them and reap the large profit exclusively for himself. As we have shown, the chemist encroaches upon well nigh every man's calling. He "blacklegs" the doctor, filches a tea-trade from the grocer, wine and mineral waters from the publican—and in point of fact wants the earth. If he attacked the patent and quack nostrum, of which he is oftentimes the inventor, and by which he exploits the public, we would agree with him, but whilst he sells adulterated drugs everywhere throughout England, Ireland, Scotland and Wales, and cares not one jot how much danger he subjects the public to by so doing, we think it is time it was pointed out to him that the Pharmacy Act has its responsibilities as well its powers, and that the Society would be more usefully employed if it purged the chemists' shop of the store of adulterated drugs, and put its pharmacopoeia in order, than in pretending that a poisonous patent preparation is any more dangerous to the public when sold by a grocer, than by a qualified chemist.

LARD AND SOMERSET HOUSE.

The County Durham case, in which the Somerset House chemists are to make their bow to the Magistrates and defend their certificates, is to come before the Magistrates in three weeks. If the pseudo-analysts at Somerset House certify the lard referred to them in the following case as genuine, the Inspector, Mr. Dunn, should ask for their appearance in court in justice to the Durham County Analyst, as their certificate is only an opinion, and a very poor one at that. There is something very strange about these Liverpool lard cases, and in the public interest it is necessary that the mystery should be probed to the bottom.

At the Barnard Castle Petty Sessions, on October 11th, Mark Milner, grocer, Barnard Castle, was charged with selling adulterated lard. Mr. Dunn, inspector for the Durham County Council, appeared for the prosecution, and Mr. Wright represented Mr. Milner and the firm of Messrs. Ayrton & Radcliffe, Liverpool, from whom the lard was purchased. Mr. W. E. Sudder said he was assistant to Mr. Dunn, and on September 12 he went to defendant's shop in Barnard Castle, where he purchased from the defendant's wife some lard, for which he paid 4d. His offer to divide the sample was accepted by defendant's wife, and he left one portion with her, kept another portion, and sent the third portion to the Public Analyst, after having notified the defendant's wife of his intention. Mr. Dunn said he now produced the certificate of the County Analyst, Mr. Stock, which stated that the sample contained beef fat, the estimated proportion of beef fat being not less than 7 per cent. In his opinion it was not a genuine sample of lard. Mr. Wright said the lard was the same brand as a great many others certified by a Liverpool Analyst, and, as the County Analyst was not infallible, he asked that the bench should order a sample to be sent to Somerset House for analysis. The Chairman: Your defence is that a sample should be sent to Somerset House? Mr. Wright: That is so. I was only instructed on Monday, and knowing that the lard has been good in the past, I am prepared to stand or fall by Somerset House. If the application is not granted I shall have to apply under Section 21 for the County Analyst to appear to be cross-examined on his certificate, and I shall have a sample analysed by a Liverpool Analyst, Mr. Campbell Brown. I don't think that is necessary, for in your Worship's discretion you may adjourn the case for a month for the purpose of having a sample—which is still in the hands of the police—sent to Somerset House. Otherwise I shall have to give the usual notice. Chairman: There is no allowance for any amount of beef fat. It is supposed to be pure lard, I think? Mr. Dunn: That is so. Mr. Wright: I simply say that it is pure lard. Chairman: Suppose there should be 7 per cent.? Mr. Piper (clerk): The costs are in your discretion. Chairman: Very well; the bench concede your application, and a sample will be sent to Somerset House, and the case deferred until November 8.

**IF YOU SELL A GENUINE ARTICLE
LET THE PUBLIC AND THE TRADE KNOW IT. ADVERTISE IT IN "FOOD AND SANITATION."**

Retail Traders study Food and Sanitation to know what Food Stuffs they can sell without risk of prosecution.

The Grocer who does not subscribe to Food and Sanitation, places himself at the mercy of unscrupulous wholesale dealers. Food and Sanitation costs only 6s. 6d. yearly, post free, and has saved its readers from many prosecutions. Send on your 6s. 6d. at once, and begin with the New Volume.

Subscribers should address, PUBLISHER,

"Food and Sanitation," 183, Strand, London, W.C.

A VERY PECULIAR VINEGAR CASE.

WHERE WAS THE ACETIC ACID ADDED.

The following case, heard at Lanchester Police-court on the 12th inst., shows the danger vinegar manufacturers incur who give warranties. They have no guarantee that the vinegar as sold to the public is untampered with. It may be dealt with as Guinness's and Bass' ale is so generally treated by bottlers—one part of Guinness or Bass to two of some cheaper beer, and the whole sold as a genuine article—yet the manufacturer whose name is dragged into the case has no remedy. In this case we have our reasons for doubting the possibility of the diluted and coloured acetic acid being in the vinegar when it left the manufacturer's works, and it was in more senses than one a great pity that the sample bottle was broken. Readers of the case will agree with us that there has been some very hard swearing somewhere.

Mrs. Gray, shopkeeper, South Moor, was summoned for selling pure malt vinegar, which on analysis was found to contain 50 per cent. of diluted acetic acid, coloured and flavoured to resemble malt vinegar, the real malt vinegar present not amounting to one-half of the entire sample. Mr. Iliff (Sunderland) appeared to prosecute on behalf of the Durham County Council, Mr. H. Wilson (Newcastle) defended, while Mr. Simpson (from Mr. Lambert's office, Gateshead), represented the wholesale firm whose name was introduced in the proceedings. Mr. B. Scott Elder, the Chief Inspector under the Food and Drugs Act, also watched the case. Mr. Iliff in his opening remarks, said that at one time there was a very strong conflict of opinion between the middle man, who supplied the vinegar, and the wholesale firm; the latter at first disputing Mr. Stock's certificate, and gave them notice to call the Analyst. They also received a letter from the defendant, intimating that she intended to produce a legal warranty in respect of the vinegar in question, but on the 2nd October a further communication was received from Mrs. Gray, to the effect that she would not plead the warranty. He (Mr. Iliff) understood that the wholesale merchants intended to fight the case, but since then he had received a letter from their London solicitors setting forth that they were not satisfied that the vinegar remains in the cask was their stuff. The third portion of the sample taken, and left with the defendant, having been broken, the firm withdrew their notice requesting him to call Mr. Stock, and had asked Mr. Lambert to watch the case on their behalf. Mr. Iliff said that if their Worships were satisfied that defendant was not so much to blame as the people who supplied the vinegar to her, then the County Council Inspectors would take whatever course the Magistrates might deem necessary to punish the defaulting parties. John William Wilson, assistant to Mr. Laidler, spoke to purchasing the vinegar from Thomasina Gray (defendant's daughter) on the 15th August. He asked for "a pint of malt vinegar." James Laidler, Inspector under the Food and Drugs Act, deposed to forwarding the sample to Mr. W. F. K. Stock, and produced the copy of his analysis as above. Mr. Williams said that the wholesale firm intended to defend the case, but had withdrawn from the position at the last moment. Mr. Simpson said the reason they had not defended the charge was because the firm had satisfied themselves that the vinegar was not theirs. Thomas Simpson, of the firm of Messrs. Wilkinson and Simpson, chemists, Newcastle-on-Tyne, said that they had supplied vinegar to Mrs. Gray for the past 18 years. The vinegar they sent to defendant on the present occasion belonged to the firm in question, and prior to the institution of these proceedings they kept no other vinegar in stock. They received large consignments of 20, 30, or 50 casks. Edwin Ball, who had been in the employment of Messrs. Wilkinson and Simpson for six or seven years, gave evidence that on the 27th July, a dozen casks belonging to this particular wholesale firm came into their establishment. On the 31st July, a cask was sent to Mrs. Gray. The bungs had not been tampered with, and each cask had the firm's label thereon (copies of which had been taken of the returned casks, and were now produced). The vinegar did not belong to any firm, this being the only vinegar they had in the place at the time. Robert Bethony, a cartman in the service of Messrs. Wilkinson and Simpson for the past 18 years, proved the delivery of one of the casks, which had not been tampered with, of this wholesale firm's vinegar, on the 31st July. Miss Gray, a daughter of the defendant, testified that the vinegar was sold precisely in the same state as it was received from the previous witness. She accidentally broke the sample bottle left by Mr. Laidler as she was reaching some things off the shelf, but another sample, supplied to Messrs. Wilkinson and Simpson, was taken from the same cask. The vinegar had not been tampered with in any shape or form, and the wholesale firm's label was on the cask when it was delivered. Miss Thomasina Gray, another daughter, swore that she supplied the vinegar to Mr. Laidler's assistant from the cask sent by Messrs. Wilkinson and Simpson. They kept no other vinegar in stock. Edward Smith, a nephew of Mrs. Gray's, proved tapping the vinegar cask. There was nothing wrong with it, and the vinegar was sold in precisely the same condition as they received it from Messrs. Wilkinson and Simpson.

IMPORTANT TO YEAST DEALERS.

Beware of adulterated Yeast. You will save yourselves prosecutions and money by reading carefully the advice given in our article on Yeast Adulteration.

Mr. Simpson said that his clients emphatically repudiated the allegations that the vinegar was the article they had supplied. They were prepared, in the first instance, to defend the case, but when they applied for the sample bottle, it had unfortunately been broken, and on testing the sample subsequently sent, they had sufficient proof that the vinegar was not theirs. The wholesale firm had had a sample of their vinegar analysed by Messrs. Allen and Hahner, both past Presidents of the Society of Public Analysts of Sheffield, and it was found to be absolutely pure. Mr. Iliff explained that the evidence already tendered did not mean that the Bench need acquit the defendant, but would only tend to the mitigation of the penalty. With reference to the sample being broken, there was the third sample before their Worships, which would have been analysed at Somerset House, if Mr. Stock's certificate had been disputed. The Magistrates considered the case proved, and imposed a fine of 40s. and costs.

WHAT IS VINEGAR?

At the Stipendiary's Court, Birmingham, on October 2nd, Jane Wells, shopkeeper, Broad-street, was summoned for selling adulterated vinegar. Mr. Challinor, Town Clerk, prosecuted, and Mr. Champney (Gloucester) appeared for the defendant, and also for Messrs. Stephens, Son and Co., of Gloucester, the brewers of the vinegar.—For the prosecution it was stated that Mr. Salt, Sanitary Inspector, called at the defendant's shop and asked for a pint of malt vinegar. The defendant said that she did not sell vinegar, but simply used it in her business as a vendor of fried fish. The Inspector pointed out that there was a notice in the window of "Pure malt vinegar," and a cask in the shop labelled "Pure vinegar," and he insisted upon being served. He was then supplied, and upon the sample being analysed it was found that it did not contain more than 25 per cent. of malt vinegar, the rest being coloured and diluted acetic acid. In cross-examination, Mr. Baines, Public Analyst, said that the sample might have been brewed from sugar, and might not contain any malt vinegar at all. There was nothing deleterious about it, and if the sample had been submitted to him as vinegar simply he would probably have passed it. By the Court: It was not brewed from malt or malted grain, and it was not vinegar according to the standard of the British Pharmacopoeia. For the defence it was alleged that the Inspector asked for vinegar simply, and not for malt vinegar, and that though the defendant was not a vendor of vinegar she served him because he led her to believe that she was liable to a penalty of £50 if she refused to do so. It was admitted that the article sold was not malt vinegar, but was brewed from Penang sugar. It was contended that as an article of commerce it was genuine vinegar, all essential constituents being present, and so closely resembling the article brewed from a malt basis that the purchaser could not have been prejudiced. The Stipendiary held that malt vinegar was the article asked for, and therefore the article sold was in contravention of the law. The case, however, was not a serious one, for, though the public were deluded to a certain extent, it was nothing like the cases where pyroligneous acid was sold for vinegar. If he had found that vinegar simply was asked for he should still have been against the defendant, and he was sorry he could not find so that the makers might have taken a case on the question. Defendant was fined 20s., and 3s. costs.

At Hertford Borough Sessions, on Thursday, September 28th, Hudson Ewbanks Kearley and Gilbert Augustus Tonge, trading as the International Tea Company, Maidenhead-street, Hertford, and Kearley and Tonge, Mitre-square, London, were summoned for selling to Thomas Johnson a pint of vinegar, which was not of the nature, substance, and quality demanded by the purchaser, and such article on analysis being found to be diluted with 60 per cent. of pyroligneous acid, on July 24th. Mr. O. V. Thorneycroft prosecuted, Mr. Baird (Messrs. Baird and Son, Solicitors, Basinghall), defended, and Mr. F. H. Mellor, Barrister (instructed by Messrs. Russell, Cooke and Co.) watched the case on behalf of the wholesale vendors of the vinegar. Mr. Baird asked for a further adjournment of the case, as an important witness who had been ordered to attend that day had not put in an appearance, but Mr. Thorneycroft raised an objection to the application, and it was ultimately agreed to proceed with the case. Mr. Thorneycroft having stated the facts of the case, he called John Lewis, of Hertford, Assistant Inspector to Mr. Johnson, who said that on the 24th July last he accompanied Mr. Johnson to the International Tea Company's shop, Maidenhead-street. Witness went into the shop while Mr. Johnson remained outside. He took a bottle with him and asked the assistant for a pint of vinegar, for which he paid 1½d. Witness then took the vinegar to Mr. Johnson, who was outside, and they both went into the shop together, when Mr. Johnson told Footer he had purchased the vinegar for the purpose of having it analysed by the Public Analyst. Mr. Johnson offered to divide it into three parts, which he did, and each bottle was corked and stamped. He then gave one to Footer and requested him to give it to the manager; the other two he kept himself. Thomas Johnson, Inspector of Weights and Measures, and for the sale of Food and Drugs Act, for the County of Hertford, said that on the 24th July

"FOOD & SANITATION" has over 20,000 Readers: Medical Practitioners, Sanitary Inspectors, Food and Drugs Acts Inspectors, Wholesale and Retail Grocers, Weights and Measures Inspectors, Town Clerks, Solicitors concerned with the Food and Drugs and Public Health Acts, Surveyors, Medical Officers of Health, and the General Public.

last he, in company with the last witness, went to the International Teashop in Maidenhead-street, and remained outside while he sent Lewis in to purchase a pint of vinegar. He returned to him about five minutes afterwards with the vinegar, which he handed to witness. He then went into the shop with Lewis, and the assistant who had served the vinegar was pointed out to him, and witness told him he had bought the vinegar to have it analysed by the Public Analyst, and offered to divide it into three portions, and he made no objection. He then gave one to Footer and told him to give it to the manager, and the other two he took away. Witness took one of the bottles to Mr. Ekins, the Public Analyst at St. Albans, and afterwards received the certificate from him, showing that the vinegar contained 60 per cent. of pyroligneous acid. Arthur Edward Ekins, Public Analyst for the County of Hertford, of St. Albans, said, on the 25th July last he received a bottle containing vinegar from Mr. Johnson, for analysis. The result of his analysis was, that he found the vinegar to contain 60 per cent. of pyroligneous acid, which would not be obtained in the usual way. The substance could not be called vinegar. The pyroligneous acid was obtained by heating hard wood in iron cylinders, and collecting that which was given off from the wood and then mixing with lime; it was then purified by gently heating. Cross-examined by Mr. Baird: He had been Public Analyst for about twelve months, but had been Analyst for 17 years in Hertfordshire previous to that. In testing it for malt vinegar he found a deficiency of phosphoric acid. Vinegar could be made from anything that would ferment and generate alcohol. If made from apples or sugar he should call it vinegar, but he should say that vinegar made from wine would be genuine vinegar, also that made from malted rice. He should pass from 10 to 15 per cent. of pyroligneous acid in vinegar, as that would be formed in the usual way, because the vinegar owed some of its properties to this acid. The question as to what was vinegar was somewhat broad. It was generally acknowledged that it should be made from malt. It was possible that this vinegar could have been made from sugar but it was not probable. The absence of the phosphoric acid and the general behaviour of the vinegar led him to think that there was pyroligneous acid. Mr. Baird said the question was whether on that day they sold a substance that could be called vinegar, and if when vinegar was asked for the purchaser expected vinegar made from malt. They had heard that vinegar could be made from other substances than malt, and when not made from malt there was not so large a percentage of phosphoric acid, and it was the absence of this acid which led the Public Analyst to think that there was such a large percentage of pyroligneous acid. It was essentially a matter for Analysts to guide them in the case, and he had Analysts present who would say that it was good vinegar. Mr. Ekin did not suggest anything about the vinegar being sold to the prejudice of the purchaser, but said it was perfectly wholesome. He suggested that Mr. Ekins had not arrived at his decision through looking for pyroligneous acid, but only by the fact of the absence of the phosphoric acid. They bought this vinegar of a wholesale firm and had a warranty with it. Mr. Baird then called Frank Scudder, a fellow of the Chemical Society of London, and assistant to Sir Henry Roscoe, who said when they spoke of vinegar they did not necessarily mean vinegar made from malt. It could be made from wine, sugar, maize, and rice, the productions of which would be called good vinegar. He received the third sample of this vinegar on the 1st September, and he had heard Mr. Ekins's opinion on it, and he did not agree with it. He did not find any pyroligneous acid in it, and in his opinion it was perfectly saleable vinegar, and he should call it genuine. If it had any pyroligneous acid there would have been traces of far, which he did not find. Mr. Ekins's method of analysing would only show him whether the vinegar was made from pure malt.—By Mr. Thorneycroft: The amount of phosphoric acid in the vinegar was .017, and he did not understand Mr. Ekins's .5. His were absolute figures, and not made from calculation. His calculation was not made from the total solids, but from the total volume of vinegar. The vinegar was not made wholly from malt. The residue was .986 per cent. He should say that the sample he had was a good wholesome vinegar. Otho Hehner, Analyst for Nottinghamshire, South Derbyshire, West Sussex, Isle of Wight, and the Boroughs of Derby and Brighton, said he had had great experience in the analysing of vinegar. The definition of vinegar in his opinion was a vegetable juice or infusion which had undergone alcoholic and acetic fermentation, and that definition was accepted by most of the eminent chemists. In an appeal case at Birmingham, the only one of this kind in this country, the Recorder accepted that as the best definition. If he had analysed the vinegar as Mr. Ekins had done he should also have come to the conclusion that it only contained 40 per cent. of malt vinegar, but there was nothing in Mr. Ekins's analysis to show what the other 60 per cent. consisted of, which

could be obtained in the proper way from rice, maize, and sugar. His opinion was, that the remaining 60 per cent. was produced from sugar. By the Bench: If he had had this sample as malt vinegar he should have said this was not malt vinegar, but he would pass it if it was made from sugar entirely and only sold as vinegar. They could make good vinegar at about 5d. a gallon. Mr. Thorneycroft said that as Mr. Ekins's analysis had been totally contradicted he should make an application under section 22 of the Act, that the sample of vinegar be forwarded to the Public Analyst to be analysed. The Magistrates retired for a short while, and on their return the Chairman said they had decided to grant Mr. Thorneycroft's application that the vinegar should be sent to Somerset House, and adjourned the case for a month.

At the West Riding Police-court, at Wakefield, on the 6th, Messrs. Bailey and Foster, grocers, were charged with selling adulterated vinegar. Mr. Hiley, from the offices of Mr. Trevor Edwards, the West Riding Solicitor, appeared to prosecute, and Mr. Lodge defended. It was alleged that defendants had sold as malt vinegar a liquid which Mr. Allen, of Sheffield, the West Riding Analyst, certified to be acetic acid diluted with water and coloured in imitation of vinegar. It was said to contain not more than 20 per cent. of the article commonly known as malt vinegar. Mr. Lodge, in defence, urged that the vinegar had not been adulterated in the least, that it was sold in the state in which it was bought from the Worcestershire Preserving Company, Limited, who guaranteed all their vinegar to be absolutely pure, and were willing to fight the case. At the request of Mr. Lodge, the Bench adjourned the case for a fortnight.

AVOID WORCESTER VINEGAR.

At Bristol, on October 11th, James Dodds, shopkeeper, of 63, Broad-quay, was summoned for selling vinegar consisting of dilute acetic acid and colouring matter. Inspector Rawlings gave evidence proving the purchase of the vinegar, and produced the Analyst's certificate. Mr. Wansbrough, who defended, said Dodds and his wife were in a very small way of business, and had no experience whatever with regard to the component parts of vinegar. They purchased the vinegar from a man named Parfitt, of 272, Newfoundland-road, whose attendance at the Court that day had been secured. When he saw the summons he said it seemed a very terrible thing that vinegar should be dilute acetic acid, but he was assured, and he had no reason to doubt the statement, that vinegar was made in many different ways—sometimes of cider, sometimes of beer, sometimes of wine, but generally of malt; and he believed the article of commerce called vinegar was malt vinegar. He understood that a considerable quantity of this sort of stuff was manufactured and sold in Bristol under the description of distilled wood vinegar. If sold under proper notice to the customer of what it was, he apprehended that it would not be an offence. He was assured that it was not injurious to health in any way. Emma Dodds, wife of the defendant, who appeared to answer the summons on behalf of her husband, gave evidence, and said she purchased the vinegar about two months ago from Mr. Parfitt. She purchased it as vinegar, and thought it was all right. James Parfitt, a brewer of temperance drinks, of 272, Newfoundland-road, said the vinegar he sold to the defendant came from the Worcestershire Preserving Company. He knew there were other forms of vinegar. Mr. Herbert Thomas, addressing Mrs. Dodds, said the Bench had a painful duty in imposing a fine of 20s. without costs, but they would advise her to consult Mr. Wansbrough to see whether she had any remedy against Parfitt, who in turn might perhaps discover whether he had a remedy against the Worcestershire Preserving Company.

HE RAN FROM THE INSPECTOR, AND PAID £10 FOR IT.

At the City Police-court, Leeds, on October 11th, Mr. Bruce fined Samuel Stow, milk seller, of Wortley-lane, 20s. for selling milk adulterated to the extent of 22 per cent. In the same court, Joseph Henry Murgatroyd, cowkeeper, of Stapleton-place, New Wortley, was charged with refusing to sell milk for the purpose of analysis. Mr. W. B. Walker, the Corporation's Inspector, stated that on the 16th ult. he met defendant in Tong-road, and asked him to sell him a pint of milk, telling him that he wanted it in order to submit to the Public Analyst. Instead of supplying the milk, however, defendant made off. There being two previous convictions against him under the Act, he was fined £10. Mr. John Harrison, Town Clerk, prosecuted in both cases.

POWELL'S BALSAM OF ANISEED—FOR COUGHS.

Powell's Balsam of Aniseed—Coughs and Asthma.
Powell's Balsam of Aniseed—Coughs and Bronchitis.
Powell's Balsam of Aniseed—Coughs and Hoarseness.
Powell's Balsam of Aniseed—Coughs and Lung Troubles.
Powell's Balsam of Aniseed—Coughs.—Safe and Reliable.
Powell's Balsam of Aniseed—Coughs.—Established 1824.
Powell's Balsam of Aniseed—Coughs.—Refuse Imitations.
Powell's Balsam of Aniseed—Coughs.—Sold by Chemists.
Powell's Balsam of Aniseed—Coughs, Night Cough, Influenza.
Powell's Balsam of Aniseed—Coughs Relieved Instantly.
Powell's Balsam of Aniseed—Coughs.—The Oldest Remedy.
Powell's Balsam of Aniseed—Coughs.—Trade Mark.
Powell's Balsam of Aniseed—Lion, Net, and Mouse.
Powell's Balsam of Aniseed—1s. 1½d., 2s. 3d.

GUARANTEED ABSOLUTELY PURE.

Warranted to stand any Analytical test. A natural product ensuring perfect digestion not possible in the various manufactured Acetic compounds

SICILIAN WINE VINEGAR.
Can be supplied in bulk.
Write for Samples and Price to Sole Proprietors:—
72, Mark Lane, London, E.C.
READ & DIGHT.

OUR IDEA of what constitutes a "Complete Food." (CAFFYN'S MALTO-CARNIS.)

THIS preparation contains the tissue-forming properties of Liquor Carnis (Caffyn), the fat and heat carbohydrate—Extract of Malt—with the refreshing stimulant of Cocoa. It is beneficial alike to the healthy as to the invalid. The tired brain-worker and high pressure victim will find in it an

The LANCET, Aug. 29, 1891.

"ANALYTICAL RECORDS.

"CAFFYN'S MALTO-CARNIS.

"(The Liquor Carnis Company, Ltd., 50, Holborn Viaduct.)

"The title sufficiently describes this preparation, and our examination confirms the description. From the presence of uncooked juice of beef, and consequently, meat albumen, it turns semi-solid on heating, and the cold filtered extract rapidly digests starch, while the presence of cocoa is evident to the taste.

Analysis showed—mineral matter, 2.50 per cent. (rich in soluble phosphates); total solid matter, dried at 100° C., 66.28 per cent. Nutritious and stimulating elements like these are rarely found combined in so satisfactory a manner as in this new and interesting preparation of the Liquor Carnis Company."

It may be, perhaps, advisable to consider in detail a few of the considerations upon which a due interpretation of the above principles are determined, and which have guided the production of MALTO-CARNIS (CAFFYN).

1st.—There must be readily diffusible proteid to cover the tissue-waste or wear and tear of the machine, to maintain as near as possible a "nitrogenous equilibrium," the pivot of Metabolism (M. Foster). This is supplied by the Liquor Carnis (Caffyn).

2nd.—Likewise the necessary carbon and hydrogen for oxidation or combustion purposes, the fuel from which the machine

DERIVES ITS MOTIVE POWER—

the "reserve of potential energy." This is supplied by extract of malt and a small quantity of natural fat.

3rd.—The stimulant which a weakened organism requires to facilitate metabolism, both

The JOURNAL of LARYNGOLOGY and RHINOLOGY, June, 1891.

"This contains two-thirds, or 66 per cent. of Caffyn's Liquor Carnis in combination with Extract of Malt and Cocoa; and a dessert spoonful may be added to milk and sweetened to taste in a breakfast-cup. The problem of combining a diffusible stimulant with easily assimilated animal food seems to have been met; and the preparation should be very valuable for weak digestions, cases of nervous depression, &c., and also to travellers, who will thus have at hand, in concentrated form, a very strong and highly nutritive food-stuff. Our experiments with this preparation lead us to conclude that it is all that the manufacturers claim for it, and that it is a most valuable preparation of novel character."

CONSTRUCTIVE AND EXCRETORY, so that waste matter may be more readily be thrown off and tissue activity increased. This is met by the pure Cocoa Extract with its alkaloid. Next to "Virol," amongst invalid nutrients, comes Extract of Malt, which has, in addition to its other properties, that of adistatic influence upon starch, and a

NOT UNPLEASANT FLAVOUR which is often utilised (more or less unsuccessfully) to disguise the nauseousness of its congener.

CAFFYN'S MALTO-CARNIS combines all these properties; it is, therefore, not only a novelty, but a triumph of the laboratory and the scientific cuisinier.

Samples and further particulars upon application to THE LIQUOR CARNIS CO. (London), ASTON CLINTON, BUCKS.

IMPORTANT TO GROCERS AND BAKERS.

If you wish to AVOID loss of money, repute and trade, caused by PROSECUTIONS for ADULTERATION, **SELL ONLY YEAST** manufactured by the following Firms:

C. A. BEUKERS.
W. A. BEUKERS.
P. BOEZEMEYER & CO.
A. DAALMEYER.
T. H. VAN GENT.
HAMER & CO.
T. HOUTMAN.
JANSEN & CO.

JANSEN & FAK.
VAN KAN & CO.
M. KRANEN.
P. T. LAGERWEY.
P. T. MEYER.
THO. C. MELCHERS.
NIEDFELD & CO.
P. SCHILTMAN.

T. T. TONINO.
T. VAN DER VALK & CO.
JAN VRYLAND.
VRYLAND VAN DEN HOOGEN & CO.
WALRAVEN BEUKERS & CO.
B. A. Y. WITTKAMPF.
T. WITTKAMP & CO.
O. T. WONTERLOOD.

The above Firms are Members of the

YEAST UNION, SCHIEDAM,

And guarantee their Yeast absolutely pure and free from any adulteration whatever.

Every Package bears



their Trade Mark.

Every shipment to England is analysed, and any Member of the Yeast Union, Schiedam, guilty of adulterating Yeast would be fined heavy penalties. The most eminent English Analysts testify to its purity and quality as follows:

LONDON,
We have carefully examined and analyzed a portion of PURE DISTILLERS' YEAST of SCHIEDAM, and found the same to be in a perfectly fresh and sound state, and entirely free from all admixture with starch, mineral matter, or any other adulterant. It was furthermore perfectly sweet, and possessed in a marked degree the fragrant and peculiar smell of Pure Distillers' Yeast.

Subjected to appropriate tests, the Yeast was ascertained to possess its full activity, and we can safely pronounce the same to be sound, very active and perfectly genuine

(Signed) ARTHUR HILL HASSALL, M.D., Lond.
OTTO HEHNER, F.C.S., F. Inst. Chem.

My investigations on the nature and qualities of this DUTCH YEAST compared with the Yeasts named at foot (procured at various times) shows conclusively:—That this Yeast is perfectly free from any adulteration whatever, whereas all the other Yeasts examined especially bearing upon this report, are adulterated in proportions varying from 10 to 60 per cent. of Farina and some also with Gypsum and Beer Yeast.

The Yeast as received was perfectly clean and fresh, contained no glutinous matter which had not been wholly transformed into Yeast, was perfectly free from acid and therefore not liable to undergo further oxidation, or to set up an acetous or putrefactive fermentation; all the other samples were decidedly acid.

From the above conclusions I have no hesitation in certifying the DUTCH YEAST as being the PUREST that has as yet come under my notice, not only as observed in this particular instance but in my otherwise large experience of Yeast.

Bread made from this Yeast was THOROUGHLY FERMENTED and had a better appearance and taste than Bread made from the other Yeasts.—It was light and porous, of an agreeable taste and good colour, and from the fact of it containing no acid it would make the Bread more digestible and less liable to turn mouldy or sour, and I HAVE NO SCRUPLE IN PRONOUNCING IT TO BE THE BEST YEAST IN THE ENGLISH MARKET.

(Signed) JAMES BAYNES, JUN., F.I.C.
F.C.S London & Berlin F.R.M.S.

Public Analyst for the East Riding of Yorkshire, the Boroughs of Hull, Scarborough, Hanley and Louth.
Royal Chambers, Scale-Lane, HULL.

N.B.—The other Yeasts examined were FRENCH, SWEDISH, DANISH, HAMBURG, VIENNA or STAR, SCOTCH and ENGLISH.

WHEN THIEVES FALL OUT, ETC.

The astounding state of things revealed in the following is eloquence itself as to the reasons why English and Irish buyers prefer to deal with Danes, Bretons, Frenchmen, Dutchmen, Swedes, or any men but their own countrymen.

At a special meeting of the Kilrush Town Commissioners, held on the 10th, at the Market House Assembly Rooms, one gentleman asked was there any Inspector under the Food and Drugs Act appointed for the Cork Butter Market. The Chairman: Inspectors were appointed all over Ireland. The questioner asked why were not the owners of adulterated butter prosecuted in Cork instead of the brokers returning it home to the owners? A solicitor said he saw where a party was fined £5 in Cork. A speaker said that must have been a long time ago. After much trouble and expense they had established one of the best provincial butter markets in Kilrush, and after that, early last spring, in compliance with the wish of the South of Ireland Butter Buyers' Association and their Committee, who waited on this Board ostensibly with the object of putting down all adulteration in the making of butter, they petitioned the Chief Secretary to appoint an Inspector under the Food and Drugs Act for the Kilrush market. The Inspector was appointed. Several farmers were fined. He had no objection to that; but when bad butter had been sent to Cork, he had to complain (if the object was to prevent adulteration in butter) that instead of having the owners of such bad butter prosecuted there, the merchants only sent it back to Clare, in order that these people would send it on again to be presented at Kilrush, Ennis, Milltown, or elsewhere. He characterised this as most dishonest and unfair to the Clare-markets, and he strongly appealed to the Press to expose the matter, as a matter of justice. Another speaker said the Cork butter merchants had returned several firkins of adulterated butter to his own knowledge, instead of having the owners prosecuted in Cork. He did not think there was much of a genuine spirit to enforce the Act elsewhere, for in Limerick, where a party was prosecuted for adulterated butter, was only a fine of 5s. put on. That was curious. After some further animated discussion, a resolution was unanimously passed calling the attention of the South of Ireland Butter Buyers' Association to the action of the Cork Butter Merchants.

THREE PREVIOUS FINES, AND ONLY 52s. 6d. THIS TIME.

At the West London Police-court, on the 6th inst., George Arnold, of 2, Windmill-road, Chiswick, appeared to answer to a summons for selling milk to Inspector Clarke, which was adulterated to the extent of 6 per cent. of added water and colouring matter. Mr. R. F. Fennis, solicitor to the Chiswick Local Board, supported the summons, and pointed out that the defendant had been fined on three previous occasions this year. In reply to the Magistrate, defendant stated that he sold the milk in the same state as he received it, but had no warranty. It was, however, proved that samples had been taken from the wholesale dealer at defendant's house, and had been found correct. Mr. Curtis-Bennet imposed a fine of 52s. 6d., including costs.

CORRESPONDENCE.

GROCERS AND CHEMISTS.

Birmingham, October 16th, 1893.

To the EDITOR of FOOD AND SANITATION.

SIR,—With respect to your article on "Grocers and Chemists," page 308, may I call your attention to the following facts:—

1. By law the Medical Council is responsible for the British Pharmacopœia, not the Pharmaceutical Society.
2. In the first quarter of that book I counted more than eight hundred articles with well defined "characters and tests," besides a number of crude drugs, of which only "characters" are given.
3. In your columns a number of prosecutions for adulterated drugs have been recorded, but the vendors have often not been qualified chemists.
4. By law Food and Drug Inspectors are responsible for the number of drugs taken, not the Pharmaceutical Society.
5. An analysis of the number of samples taken in 1891, compared with the number of persons employed in the retail trades as given by the 1891 Census, shows that there is no serious disproportion of samples taken from chemists as compared with grocers.

	No. of Articles Sold.	No. of Persons Employed.	Ratio 1 to
Milkmen ..	12,151	35,639	3
Grocers, Bakers, &c.	12,679	329,335	26
Chemists ..	740	21,930	30
Publicans, &c..	3,458	105,198	34
Total Samples..	29,028		

Out of the samples credited to grocers, 3,044 were peppers, mustard, vinegar, aerated waters, &c., a large number of which were probably sold by chemists, if this could be corrected the ratios of chemists and grocers would be still more nearly equal.

6. For twenty years after the passing of the Pharmacy Act there were no prosecutions of grocers for selling patent medicines, and the first was a Government prosecution by the Public Prosecutor, after which he directed the Pharmaceutical Society to execute the public duty imposed on them by law, and prevent the illegal sale of patent medicines containing poisons.

7. Most articles sold by grocers are harmless, and if a poison is sold by a grocer it is more likely to be carelessly used than if bought from a chemist, who largely deals in poisons.

8. The chemist has a right to legal protection, as he is compelled by law to spend much time and money in study and examinations before he is allowed to sell poisons.

I ask you, sir, in justice to chemists, to insert this letter by one who is not a chemist, and remain,

Yours truly,

J. F. LIVERSEGE, F.I.C., M.P.S.

297, Rotton-park-road, Birmingham.

RAWLINGS' MINERAL WATERS,

As supplied to HER MAJESTY THE QUEEN.

Ginger Beer as Brewed the last Hundred Years,

IN STONE BOTTLES AND CASKS.

Gold Medallist for Purity and Excellence.

H. D. RAWLINGS, Limited, Nassau Street, London, W.

WHEAT PHOSPHATES Nourish Brain and Frame, Form Bone, Teeth and Muscle, and Enrich the Blood.



Is the only Food which contains the WHEAT PHOSPHATES extracted from Wheat Bran, and is therefore the most NOURISHING food in the WORLD.

For **INFANTS**: Developing Bones, Muscles, Teeth, Brain;

For **INVALIDS**: Restorative and Invigorating; retained by the weakest stomach when all other food is refused.

For **ADULTS**: A Delicious Breakfast and Supper Dish; Vitalises the brain and all the functions of the body.

1-lb. Sample in HANDSOME ENAMELLED Box sent free on receipt of 8d. to cover postage (mention this Paper).

Sold by Grocers, Chemists, &c., in tins, 1 lb. at 1s., 4 lbs. at 8s. 9d., or sent carriage paid by

FRAME FOOD CO., LTD., LOMBARD ROAD, BATTERSEA, LONDON, S.W.

CALVERT'S CARBOLIC OINTMENT,

Large Pots, 13d. each, with full Instructions.
Court Circular says: "We cannot too highly recommend Calvert's Ointment. It is the best general Ointment with which we are familiar, and ought to be a stock remedy in every household."

Private report from Limassol Cyprus: "I have never found anything to come up to it for neuralgic 'Rheumatic Pains.'"

Samples sent Free by Post on receipt of value.

F. C. CALVERT & CO., MANCHESTER.
Awarded 60 Gold and Silver Medals and Diplomas.

has been pure, but because they have been incapable of making an accurate analysis of it, and in dealing with lard cases, magistrates are beginning to know this. The case where Mr. Wilkinson so humorously gave Somerset House away occurred at Steyning Petty Sessions.

On October 23rd, Messrs. Kearley and Tonge, trading as the International Tea Company, at Shoreham, were summoned for selling adulterated lard at Shoreham. The case, which came before the Court a month ago, had been adjourned at the request of defendant's solicitor (Mr. Ernest J. Wilkinson), in order that the sample of the lard in the possession of the police might be sent to Somerset House to be analysed. Mr. Wannop (of Chichester) prosecuted, and Mr. Ernest J. Wilkinson (of London) defended. Mr. Flowers (Magistrate's Clerk) said that he had received the following letter from Somerset House:—

28th September, 1893.

Sir,—With regard to the sample of lard sent here for analysis marked "68," and referred to in Superintendent J. J. Byrne's letter on the 25th inst., I have to acquaint you that, owing to the lard having been improperly placed and kept in a paper wrapper, a portion of the more liquid fat has been absorbed by the paper, and the original composition of the lard thereby altered. Under these circumstances we shall be unable to furnish the Court with a certificate of analysis. I herewith return the sample of lard—I am, Sir, your obedient servant (Signed), R. BANNISTER, Deputy Principal. The Clerk to the Justices, Steyning.

Superintendent Byrne was the first witness, and, in reply to Mr. Wannop, said he obtained the sample (produced) of lard from the International Tea Company's premises at Shoreham. He asked the assistant for a piece of grease-proof paper, and he wrapped the three samples individually in the paper, and covered two of them with brown paper. Mr. Wannop: Is that the best way you could keep it? Witness: That is the best means at our disposal. Continuing, witness said, holding a box in his hand, that that was supplied to him by the Chief Constable for the purpose. He put the lard in the box, which was divided into partitions. His instructions were to put the samples in boxes like the one produced for safety, and also for transit. Mr. Wilkinson: You cannot say it is a proper box, because it manifestly is not a proper box. Mr. Wannop (holding a small parcel in his hand): Is that the sample you sent to Somerset House? It is. Has the seal been broken? Never. Never been broken? Never. Mr. Wannop said he put the question because the authorities at Somerset House had never opened the sample and found that it was wrapped in grease-proof paper. Seeing that it was brown paper outside, they came to the conclusion that it was wrapped in brown paper only. That was not so. Superintendent Byrne: This is the best means at our disposal. Mr. Wilkinson: It should go back, with directions to open it. I am sure the lard is pure, and I want it analysed. I ask that it may go back to be opened by them. I have the delivery note, which certifies the lard to be pure. This question has been tried over and over again, and in every case the Somerset House Authorities have certified the lard to be pure, notwithstanding the County Analyst's certificate. At this point the Chairman asked that the Analyst's report might be read. It certified that the sample of lard was adulterated with 5 per cent. of beef fat. Continuing Superintendent Byrne's examination, Mr. Wannop asked if any of the grease had exuded through the paper, and the Superintendent gave an affirmative reply, adding that it was very hot weather during the time he had to keep it. Mr. Wilkinson repeated his application that the sample should be sent back, whereupon Mr. Wannop, rising immediately, said no question had been raised as to the correctness of the Public Analyst's certificate until that day, and no evidence had been tendered to show that it was wrong. The Public Analyst had not been called, as he might have been, and he submitted the case was all in his favour. Their Worships were bound to adjudicate according to the certificate, unless there was something to show that the certificate was wrong; and their Worships—and he said this with submission—wrongfully exercised their discretion in sending the sample to Somerset House. He submitted not one tittle of evidence had been put forward to show that the Analyst was wrong. The sample had been returned from Somerset House. It was packed as they had heard in grease-proof paper, wrapped in brown paper, and placed in the box provided by the superintendent. But the grease apparently came through. There was another case against the Tea Company. Apparently the Somerset House authorities had come to the conclusion that because it was packed in brown paper there was no inner covering. He cited the case of *Harrison v. Richards*, where no evidence was given to contradict the Analyst's certificate, and the Magistrates convicted. The present case, he submitted, was precisely similar, and the Bench were bound by that decision. The case was one of considerable importance. The authorities in the county had done all in their power, and it seemed to him that if the contention with regard to Somerset House was

THE PUREST OF ALL SCOTCH WHISKIES.

D. LENNOX & SONS

LONDON OFFICE:

41, PALL MALL,
S.W.

Bonded and

Bottling Stores

DUMFRIES,
N.B.



LENNOX'S WHISKY

36/-

42/- 48/-

PER DOZEN CASH.

Delivered within London

Carting Circuit, or Carriage

Paid to nearest Railway Station

in Great Britain.

Do not drink Blends of Malt Grain
and Potato Spirit.

Medical Men and Connoisseurs will find this the
perfection of an absolutely pure & wholesome spirit

FOOD & SANITATION.

IMPORTANT TO LARD DEALERS.

Mr. Wilkinson, Solicitor to Messrs. Kearley and Tonge, is a genuine humourist. Anything more subtly ironical than his demand that the lard in the following case "should go back to Somerset House because in every case the Somerset House authorities have certified the lard to be pure, notwithstanding the County Analyst's certificate," it would be hard to imagine. The Magistrates, in the first instance, had no right to order the sample to be sent to Somerset House, as there was not a particle of evidence to throw any doubt upon the accuracy of the County Analyst's certificate; but even if there had been any doubt as to its accuracy, such doubt could not be resolved by the Somerset House incapables. It is a fact, as Mr. Wilkinson said, that Somerset House have always returned lard as pure, and that for a very good reason—not that the lard

to hold good there would be endless trouble both for the police and the authorities. Mr. Wilkinson said if the authorities had looked at the sample and had come to the conclusion that they could not give a certificate, his contention was that the summons was not taken out within the allotted time. Mr. Flowers said the Bench overruled that point on the last occasion. Mr. Wilkinson said he had papers stating that the lard was absolutely pure—they bought it with a guarantee that it was pure—but could not give evidence as to its manufactory, as it was manufactured in Chicago. He could produce a cablegram from Chicago, which said, "We guarantee absolutely pure; no beef fat." He submitted it was a case in which they ought not to convict. Mr. Wannop said he was instructed not to press for a heavy penalty, and Superintendent Byrne said he was instructed to apply for the solicitor's fee. This the Bench refused to allow, and fined the defendants £1 and 13s. costs.

This and other lard cases ought to put grocers and provision dealers on their guard, and show them the folly of buying lards that they cannot be certain are unadulterated. Messrs. Bancroft and Sons and Messrs. Irven Bros. guarantee their lards absolutely pure. If grocers want to avoid the discredit and loss of trade attendant upon an adulteration prosecution, we counsel them to buy only such lards as they see advertised in our columns, and not to trust to the incapacity of Somerset House to shield them when they make mistakes.

A LESSON FOR CORK AND LIMERICK.

If Cork, Limerick and other Irish towns had Food and Drugs Act Inspectors that possessed a tithe of the energy shown by Sergeant John McHugh, Ennis; Irish butter would not be looked at askance in English markets. The following are a few instances of what is being done in the district around Ennis:—

On October 6th, at Ennis, before Mr. F. G. Hodder, R.M., John Boland, a farmer, living at Shanbooly, Lissycasey, was summoned by Sergeant John McHugh, Inspector under the Food and Drugs Act, for refusing to sell him a sample from a firkin of butter which defendant had for sale in Ennis market on the 16th September, 1893, for the purpose of analysis. The sergeant deposed that he tendered defendant the price of the sample, but he refused to give it. Defendant—I had the butter sold. There was a great drag for butter. A buyer told me not to give the sample, that he would give me £3 for the firkin. The Sergeant: It was exhibited for sale when I came. He said he had it engaged to Thomas MacDonnell. It was not marked, and if it was sold it would be marked by the buyer. Thomas MacDonnell was examined on behalf of the defendant. He said he had the firkin and he did not mark it, nor had he paid for it. Mr. Scott: It was not in your possession? Mr. T. Crowe (to defendant): Did you sell it? Defendant: I sold it at £3. Mr. Dunning: He sold it all the same. Taking a sample does not prevent the sale. All the butter of which samples are taken is bought after. Mr. Willis: He might be under the impression that when he had it engaged he could not give the sample. The Chairman: What position is he in? Defendant: I am a poor man. I lost three of my cows this year. The Chairman: You will see in English newspapers protests from the merchants against the condition in which Irish butter is sent over to them. This juggling can't be allowed, saying the butter was sold when there was no sale. As long as the law is in operation it must be complied with. You can never stop adulteration in this country except by putting on heavy fines. Defendant was fined 40s. with 9s. extra costs.

Thomas Freeman, of Knock, was fined £2 and costs for refusing to sell a sample of butter out of his firkin in the Ennis Market on the 13rd Sept. This defendant went also on the plea that it was engaged to a butter buyer, but the Magistrates stated that if another case of the kind came before them they would impose the full penalty.

Patrick Shannon, of Gurtanafarnan, was fined £2 and costs, for selling butter containing 22.85 per cent. of water.

Ellen Canny, of Lannagh, was fined £1 for selling butter with 21.7 per cent. water.

Catherine Neylon, of Morrismills, was fined £1 for selling butter with 22.29 per cent. of water. The defendant did not appear, but Thomas, her son, was present. When the Chairman imposed the fine of £1 he exclaimed, "Oh, begor, sir, that is too much; we put no water in it, and we thought it was honest butter." The witness created great amusement in court.

MARGARINE AS BUTTER, AND SHORT WEIGHT SCALES.

Samuel Woolley, grocer and provision dealer, 414, Dudley-road, Wolverhampton, was charged on October 19th, at the instance of Mr. G. F. Allwood, Inspector of Food and Drugs for the borough, before Mr. N. C. A. Neville (Stipendiary Magistrate), at the Wolverhampton Police-court, with selling, on the 23rd of September, margarine for butter, it only containing 20 per cent. of real butter; a second charge was that he being a person dealing in margarine, he exposed some for sale without having the name attached to it; a third charge was for having in his possession a scale which was unjust; and a fourth charge was of selling bread otherwise than by weight. Mr. R. A. Wilcock appeared for the defence. The Inspector stated that defendant really lived at Willenhall. On the 23rd ult. he visited defendant's shop, and found there a scale four drachms against the purchaser, caused by having a piece of butter under the scale. Previous to this witness had sent into the shop a girl to purchase some bread. She asked for a large loaf, which was served to her, but not weighed in her presence. When this was subsequently done the loaf was found to

be nearly five ounces deficient. A boy named Harry Toy was sent in to purchase half-a-pound of butter at 1s. 2d. a pound. The branch manager served him from a piece of butter, and put it, as was said, accidentally into a margarine wrapper. The butter was found, on an analysis being made, to contain only 20 per cent. of real butter. It was a large shop, and situate in a poor district. For the defence it was urged that Mr. Woolley had been in business for twenty-nine years, and the present charge was the only one brought against him. For selling margarine when butter was asked for a fine of 40s. and costs was imposed, and the margarine summons was dismissed. The fine inflicted for the unjust scales was 10s. and costs, and that for causing bread to be sold otherwise than by weight was 5s. and costs. A charge against the branch manager of the shop, Arthur Elton, for wilfully committing a fraud by the use of the scale, was dismissed on payment of costs.

YEAST ADULTERATION: IMPORTANT TO DEALERS.

During the past week several samples of yeast have come under our notice, in which prosecutions are pending for adulterations of in some instances as high as 50 per cent. Dealers in yeast ought, therefore, to exercise great caution in their purchases, as the sale of adulterated yeast has gradually, through having been practically uninterfered with, assumed very large proportions. Indeed, for years, in many important districts in England, no samples of yeast have been taken. The fraud of mixing 50 per cent. of starch with an article and selling it as yeast is one which, now that public attention is directed to it, will be no doubt punished and suppressed as stringently as was the sale of pyroligneous acid as vinegar. In our last warning to the trade, we find that by an oversight the names of two firms who guarantee their yeast pure, and who are members of the Schiedam Yeast Union, were omitted. The firms in question are

H. C. JANSEN, Schiedam, and
HOCK & Co., "

MORE RIDICULOUS FINES.

At Durham, on October 18th, before J. E. Rogerson, Esq. (in the chair), and Mr. Forster, Esq., Robert J. White, of Thirlington, was summoned for selling whisky which was adulterated to the extent of 8 per cent. of added water. Mr. Scott Elder, Chief Inspector of Weights and Measures, appeared to prosecute. Defendant pleaded guilty, and was fined 10s. and costs.—Thomas Emery, of Old Cornforth, was summoned for selling, by his wife, Elizabeth Emery, a pint of rum which was adulterated to the extent of 24 per cent. of added water. Mr. Elder again appeared to prosecute, and said the Government allowed publicans to put 25 per cent. of water in the rum. Defendant had put 24 per cent. in addition to this, the rum therefore containing 49 per cent. of water. George Wilson, assistant of Mr. Elder, proved the purchase of the rum. The County Analyst's certificate was submitted, which showed that the rum was adulterated to the extent of 24 per cent. of added water. Defendant said he owned a tied house, which belonged to Messrs. Plews, and the liquor was mixed when it came to him. It was very hard on him. The Bench imposed a fine of 20s. and costs.

NEXT HUMBUG.

Mr. Stead says in *Borderland*:—"When I was in the train at Dover I succeeded in securing an automatic telepathic interview with Lady Brooke, who was at that time at Dunrobin Castle, in the extreme north of Scotland; the distance between us must have been about 600 miles. I had not heard from Lady Brooke for weeks, nor had I heard from her since I published my article on "The Wasted Wealth of King Demos." My hand wrote her criticisms of the article, and—in short, I interviewed her without her conscious knowledge at a distance of 600 miles. When I arrived at Victoria Station, I received from my manager a letter from Lady Brooke, which embodied in brief the substance of the communication written with my hand on the line between Dover and Canterbury.

THE PHARMACEUTICAL SOCIETY'S CRUSADE.

KAY'S ESSENCE OF LINSEED.

At Dublin, on October 12th, Mr. Swift gave judgment in the case of the Pharmaceutical Society v. Leonard. The summons was brought against Mr. Leonard, grocer and general merchant, for having sold a bottle of "Kay's essence of linseed," it being a compound which contained certain of the scheduled poisons, the sale of which is prohibited by the Pharmacy Act of 1875 by persons who are not chemists. The Magistrate dismissed the summons, holding, first, that the compound came within the meaning of Section 31 as a patent medicine; and secondly, that while the specification might have been more precisely followed, the compound had been made up in conformity with it. He gave no costs, as he was judicially aware that both cases had been brought on as test-cases.

CHLORODYNE.

At Tunbridge Wells County Court, on the 6th October, before his Honour Judge Homersham Cox, the Pharmaceutical Society sued Messrs. Cullen & Gain, grocers, Tunbridge Wells, for £5 penalty by the council of the plaintiff Society against defendants for an infringement of the Pharmacy Act by selling drugs of a poisonous nature. Mr. Gain, who appeared, admitted the offence, and said that the man who sold the drug complained of (chlorodyne) had done so without instructions. The action would therefore not be defended, and he paid the amount claimed into court. His Honour said he should not call evidence, and gave judgment for the Society with costs.

THE INFLUENCE OF FOOD ADULTERATION UPON HEALTH.

By DR. ALFRED HILL, Medical Officer of Health, Birmingham.

By the courtesy of Dr. Alfred Hill, F.I.C., Medical Officer of Health, Birmingham, we are able to re-publish the following able paper read at the Newcastle Congress of Medical Officers of Health held August 4th, in this year, and printed in the September number of *Public Health*.

The influence of food adulteration on health is a subject which much less than many others has occupied the attention of Medical Officers of Health. The causes for this comparative inattention are several. One is the rarity of the occasions when the question is brought before them, another is that the chemical side of the subject is one dealt with by the Analyst more than by the Medical Officer of Health, and a third is that the possible influence for evil is less apparent, and therefore less appreciated than many other dangers to health, such as belong to contaminated water, decomposed or diseased meat, vitiated air, and the various insanitary conditions which are more frequently presented to their notice.

It is because of this neglect of what I consider is a very important question that I have brought together a few facts affecting some important articles of food, together with drink, and drugs, and embodied them in this paper, which pretends to be nothing more than a very incomplete contribution to the subject.

Among the principal articles of food

Milk may fairly claim our first consideration, inasmuch as it is a perfect food, and the first that nature provides for the young mammal. Not only so, it is the food which is best in the second as well as in the first childhood of man, when the powers of life are on the wane, and it is, moreover, the one food upon which he depends chiefly in very many cases of illness; it is *par excellence* the food of the invalid. This being so, it is a great fraud and a great moral offence to tamper with it, as is too often done for the sole object of gain.

The frauds practised on milk are the addition of water, the abstraction of fat, and certain additions made principally for the primary purpose of colouring or preserving it.

The addition of water has the effect of diminishing the solids or nutritious constituents of the milk to a point below what Nature has fixed, and which presumably, therefore, is best. A given quantity of it may, when so diluted, be insufficient for the nourishment of a child, although the same quantity before dilution would have been adequate, so that the result is incipient partial starvation.

The abstraction of fat in the form of cream is injurious in diminishing the supply of that constituent of milk which, though contributing little comparatively to the formation of tissue, is essential for the generation of heat and energy and certain special respiratory needs. In cases of disease such as phthisis, in which fat is an important remedy, its abstraction may prove highly disadvantageous. When, as I frequently find, both water is added, and fat abstracted at the same time, the case is so much the worse.

The hardship of milk adulteration presses with special force upon infants, and this not only in the case of fresh milk, but also in the case of the condensed milks which at the present time are so largely used where fresh milk is not easily procurable, or on account of their supposed superiority.

I do not wish to suggest that all these condensed milks are inferior. Where they are properly prepared, and especially when unsweetened, they are excellent, and on account of their mode of preparation they are uniform in composition, protected from contamination, infection, and decomposition by hermetical sealing, and owing to the heat required for their condensation are free from germs of every kind, whether diseased germs possibly derived from the cows, or disease or other germs from other sources.

But the majority of the condensed milks regarded as infants' food must be considered as adulterated. They are too often deficient in the necessary fat, they are overcharged with objectionable cane sugar, and they are directed to be diluted with such absurdly large quantities of water that not only do they derange the digestion, but their sole and continued use must inevitably bring about starvation. Dr. Atfield's evidence that these highly cane-sugared milks are peculiarly adapted for the feeding of infants is at variance with experience. For a very useful and instructive contribution on this question I would recommend the perusal of a paper published in the *Birmingham Medical Review* of January, 1891, on "Condensed Milks and their Influence on the Health of Infants," by T. Eustace Hill, M.B., B.Sc., A.I.C.

Ordinary milk and cream, being very perishable articles, are not exempt from admixture with preservatives or antiseptics, which at the present time are so much employed, and thus they help to swell the dose of medicinal substance ingested every day, and which in the aggregate must exert a considerable, even if occult, influence on health, particularly the health of infants.

The adulteration of milk with water, to which I just now referred, carries with it a much greater danger than that of merely diminishing its nutritive value. It may be, and often has been, according to the investigations of Dr. Ballard and others, the means of conveying into milk the germs of typhoid fever, and of causing in some instances widespread attacks of the disease, so that the addition of the yield of "the cow with the iron tail" is by no means so harmless and venial an offence as it is by many regarded.

Bread and Flour.—The universal and constant use of bread wherever it can be obtained, and the very large proportion it bears in the diets of most people to other articles of food, have properly earned for it the designation of the "staff of life." Bread, or its basis flour, enters into every meal, and in the case of very poor people is

often the sole food. It is, therefore, all the more important that it be of good quality and not adulterated. In former times, when bread was dear, and the flour often of inferior quality, adulteration was very commonly practised, with the object of concealing the inferior quality, or of fraudulently increasing weight and profit. At the present day the adulteration of bread and flour is still going on, compared with what it formerly was, nevertheless, it exists to some extent. Some years ago I found several percentages of sulphate of lime in a flour, for the addition of which the miller was convicted and fined, and I have on several occasions found alum in bread, though its use, except in some "baking powders," has almost entirely gone out. I have also found maize in flour, and it is highly probable that wheaten flour is often mixed with potatoes and other starchy substances in considerable quantities. These latter additions are not positively and directly injurious; they are, however, frauds, as they are both cheaper and less nutritious than wheaten flour. The addition of alum, however, is more serious, inasmuch as it has for one of its objects the giving of an improved appearance to a bad or damaged flour. Liebig's opinion is that it renders insoluble gluten which has been made soluble by the action of acids (acetic and lactic) which have been generated in fermentation induced by dampness.

The introduction of alum into bread has been recently effected by the use of "baking powders," consisting of carbonate of soda and common alum, in the proportion of 60 and 40 per cent. respectively, common alum being now substituted for tartaric acid, which was formerly employed, on account of the higher price of the latter. It is always found that considerations of profit lie at the root of all these adulterations.

A few months ago an appeal case was heard at the Glamorganshire Quarter Sessions, in which a grocer was prosecuted for selling baking powder containing alum and carbonate of soda.

It was argued, on the one hand, that the alum is injurious, while for the defence on the other, it was maintained that as the alum is reduced by the soda to the condition of alumina, it is harmless, as the latter is insoluble. This contention is ingenious, as such defences always are, but it is not supported by facts, for it was experimentally proved on behalf of the prosecution that the alumina liberated from the alum is redissolved in the hydrochloric acid of the gastric juice, forming an irritant salt, while the latter, on passing into the intestine, is again acted upon by the alkaline pancreatic and intestinal juices, which not only liberate the alumina a second time, but also dissolve it, as well as any phosphate of alumina, and enable it to be absorbed into the system. The solution of alumina in the gastric juice was experimentally proved by Mr. Morgan, the Public Analyst.

That absorption actually occurs was proved by the administration of the hydrate in quantities of 15 to 30 grains a day to a man in whose urine aluminium compounds were subsequently detected, and the irritant action produced by the alumina taken was proved by its having caused vomiting on one occasion. These experimental results were supported in evidence by physiologists and chemists, of high repute, including Professor Dunstan, Mr. Hehner, Dr. Lauder Brunton, and several others, and it was stated that the hydrate of alumina in the bread interfered with the digestion of starch by ptyalin (diastase was used in the actual experiment), and with both peptic and pancreatic digestion.

Expert evidence was called for the defence, including Dr. B. W. Richardson, Dr. Luff, Mr. Wynter Blyth, and Mr. Sutton, chemist, but some of it was neither ingenious nor convincing, and one witness (Dr. B. W. Richardson) is reported as admitting, in cross-examination, that with regard to baking powders containing alum "he had come very clearly to the conclusion that from alumina hydrate there was sometimes caused constipation and indigestion. He admitted that, but it never went further than a mere local effect. It never had a constitutional effect!" I consider this statement difficult to prove, and an admirable specimen of special pleading.

Cocoa is not only very largely consumed, but it is one of the most nutritious of the ordinary articles of food. It is said to be thirteen times more nutritious than tea, and four and a half times more than coffee, so that it is pre-eminent as a food, and of exceptional dietetic value to certain classes of persons. Owing, perhaps, partly to this fact, and partly to the ease with which its characters lend themselves to adulteration, it has been more sophisticated than most foods. It has been so dosed with starch and sugar that the resulting mixture has contained no more than one-tenth of real cocoa. An article so reduced in quality may with propriety be called "homœopathic" as regards the quantity of cocoa present in it; indeed, "the nutritive value of the quantity of cocoa used for making a cupful must be infinitesimal," and may be regarded rather as a mixture of starch and sugar flavoured with cocoa. Such a dilution as this must in many cases be actually, if not very palpably, injurious, although the adulterating substances cannot themselves be said to be noxious; but there is another substance which is in itself noxious—I mean potash, which is used in some, especially foreign, cocoas, claiming on the ground of the absence of starch, sugar, and other attenuants to be genuine. The addition of this substance is altogether unnecessary, as the best cocoas contain none. The objects of its addition seem to be to assist the disintegration of the bean during manufacture, to deepen the colour and so give the appearance of greater strength, and at the same time to effect partial saponification of the cocoa butter, thus giving greater smoothness and so-called solubility to the product.

(To be continued.)

If your Advertisement is not in "Food and Sanitation" do you know what people say?—That your articles are not pure, and they avoid them.

ROOTING OUT VINEGAR IMPOSTURES IN IRELAND.

Sergeant Sheridan deserves every credit for being the first official to endeavour to protect the public in Ireland from dilute acetic acid sold as vinegar.

At Enniskillen, on October 9th, he charged Cox Brothers, Belmore-street, with selling vinegar which, according to Sir Charles Cameron, Public Analyst, consisted chiefly of acetic acid. Mr. Joseph Alexander (Alexander & Irvine, solicitors) appeared for the prosecution, and Mr. John F. Wray, solicitor, defended. Sergeant Sheridan, examined, said on the 19th July he went into the establishment of Cox Brothers and purchased a pint of vinegar, for which he paid 4d. After purchasing it, witness told the assistant, James Cox, who gave him the vinegar, that it was for analysis. Witness then divided the pint in the usual way. Sir Charles Cameron's certificate was to the effect that the article was not vinegar, but that it consisted chiefly of diluted acid, which had recently been determined by the courts not to be vinegar. Joseph Cox, examined, said he ordered a quantity of vinegar from the manufacturers and that it was duly received. The article was labelled white wine vinegar. Afterwards, on learning of the Sergeant's intention to prosecute, witness wrote to the manufacturers acquainting them of the fact that the article supplied by them as vinegar had been found to be acetic acid. The manufacturers wrote back to say that the article supplied by them as white wine vinegar was really white wine vinegar. Mr. Alexander: The letter is not legal evidence. I am sure Messrs. Cox sold the article as they received it, but the gentlemen who are guilty should be here to defend the case. Examination continued: The vinegar received from the manufacturers was the same as that supplied to the customers. Mr. Alexander said he did not accuse Messrs. Cox of manufacturing the article. He was sure it was sold as it was obtained from the manufacturers who, he thought, should have been present to defend the case. Mr. Wray argued that if the bench were satisfied that the defendants were innocent of the manufacture of the article they should, under the 25th section of the Food and Drugs Act, refrain from inflicting a penalty on his clients. Under the section referred to their Worshipships could dismiss the case against the defendants, inasmuch as what amounted to a warranty had been given by the manufacturers when they sent the article to his clients labelled as vinegar. There was something radically wrong in the law if a man could be punished for a thing of which the Court was satisfied he was innocent. Dr. Walsh, J.P.: He has his remedy. It is not likely in such a case that the manufacturer will allow the trader to suffer. Mr. Wray: Where there is a section of the Act of Parliament providing for a trader's protection I say it is a deliberate injustice to punish him. Mr. Teele: But that 25th section refers to when there is a warranty given with the article. Mr. Alexander did not press for a heavy penalty. The majority of the Bench, considering that there was no warranty within the meaning of the Act given with the article, fined the defendant in £1 and 10s. costs.

WAS THIS A BEET VINEGAR.

At the Caerphilly Police-court, on October 10th, before Dr. Jewell, Mr. H. Anthony, Mr. H. D. Phillips, Dr. Leigh, and Mr. E. I. Williams, W. Hoghe, greengrocer, Nelson, was summoned under the information of Inspector Jones, "for that he did sell an article of food, to wit, malt vinegar, which was not of the nature, substance, and quality of the article demanded by the purchaser, to be vinegar and 70 per cent. of diluted pyroligneous acid to the prejudice of the said purchaser." Mr. W. E. R. Allen (deputy clerk of the peace) prosecuted on behalf of the police, and Mr. A. W. Nicholson (from the office of Mr. H. Cousins, Cardiff), defended. In opening the case, Mr. Allen said the summons was taken out under section 6 of the Food and Drugs Act, 1885. This was different to some cases which had been before heard, because here the vinegar was not asked for merely, but the Inspector took the trouble to ask for malt vinegar. He did not think it would be necessary for him to show that where an Inspector asked for an article he expected to get it. Superintendent Jones, of Pontypridd, said that on the 20th August last he visited the defendant's shop and asked for half a pint of malt vinegar for which he paid a penny. The vinegar was supplied by the defendant's wife, the defendant being only a short distance off. He divided the vinegar in the usual way, and offered Mrs. Hughes one portion. Sergeant Brinson corroborated this statement. Dr. Wm. Morgan, Public Analyst for Glamorgan, deposed to receiving the sample of vinegar from the Superintendent of police. He analysed a portion of it, and found that the sample was not malt vinegar. The specific gravity was 1.0255, the acetic acid 4.02 per cent., and the extracted matter 4.79 per cent., residuum or ash 1.29 per cent. Cross-examined: He placed no great weight on the specific gravity of this vinegar, because it might vary. The phosphoric acid was 0.0142 per cent., so that he calculated the percentage of malt vinegar in the sample was 30. He admitted that acetic or pyroligneous acid was an essential constituent of vinegar, but he could not definitely say that the acid in the sample was pyroligneous. Mr. Nicholson contended that the case must fall. They were summoned for selling vinegar adulterated with

pyroligneous acid, and the prosecution had failed to establish this allegation. Mrs. Hughes was called for the defence, and stated that Superintendent Jones did not ask for malt vinegar. Another witness deposed that the Superintendent simply asked for "half a pint of vinegar." Mr. Samuel Chivers, of Cardiff, stated that he was a vinegar brewer. The substances used in the manufacture of vinegar were malt, grain and sugar, in his case, the preponderating quantity being sugar. No manufacturer ever used more than 7 per cent. of malt to convert the starch in the raw grain into sugar, when it became soluble. Pure acetic acid would not form a fungus, but his vinegar would do so. From a commercial point of view, it would cost the manufacturer more to put acetic acid into the vinegar than to complete the manufacture by vinous fermentation. Mr. Otto Hehner, past President of the Institute of Public Analysts, and Analyst for the counties of Nottingham, Derby, &c., said that on the 4th of October he expected to find in commercial vinegar a certain amount of acetic acid, which existed generally to the percentage of 4 or 5. He had been over and inspected the works of Mr. Chivers, and found that although he did not make a malt vinegar he manufactured what was generally accepted as a pure and genuine vinegar. Mr. Geo. Embrey, Public Analyst for Gloucester, gave corroborative evidence, after which the Magistrates retired. On returning into Court the Magistrates were of opinion that the case had been proved, and fined the defendant 5s. and costs.

THE "NEWCASTLE EVENING NEWS" GIVES STUPID ADVICE.

In its issue of October 5th, our verdant contemporary says:-

"GET A CERTIFICATE WITH YOUR MILK."

"If the story told, at the Gateshead Petty Sessions to-day by Margaret McCombes was true, then she is hardly treated by the law. Mr. Purdy, an Inspector, called at her shop in Felling, and bought a pint of milk, which was analysed, and found to contain 12 per cent. of added water. The shopkeeper denied that she had added the water. She bought it daily from a Mr. Lowrey, and she thought the Inspector should have called also at Mr. Lowrey's and had some of his milk examined. The Bench advised Mrs. McCombes to have a guarantee from the person who supplied her with the milk, and fined her 2s. 6d. and costs."

If Margaret McCombes followed the above advice, she would not protect herself from vending adulterated milk, or ensure her customers getting pure milk. If she bought the milk in question from Mr. Lowrey, and sold it as received, she has her remedy for damages against that gentleman in the Courts. If milk vendors are never guilty of adulterating their milk—and from what they say when they are prosecuted, it would appear that it is not even "hardly ever" that they do it, but absolutely—never—it is strange they never prosecute the farmer whose victims they so piteously proclaim themselves. We would rather see them do that, than practice the "warranty" riddle, as some of the largest of our London milk vendors do, and we are surprised at the stupidity of our contemporary in giving such advice instead of educating Nupkinses upon the Bench as to the swindling pernicious effect of the warranty dodge.

HE SHOULD PROSECUTE THE WHOLESALE MAN.

At Eastbourne Police-court, John Berry, an elderly man, was summoned for selling milk adulterated with 10 per cent. of added water. Mr. Lawson Lewis defended. Mr. John Henry Ollett, Sanitary Inspector for the Central Ward, said: On August 25th, at about 8.15, I was in Ashford-road, near Cavendish-place. I saw a milk perambulator in charge of a boy. I asked him to supply me with a pint and a half of new milk. He said he had not any. Defendant came up with a milk perambulator. I said, "Your lad has sold out. I want you to supply me with a pint and a half of new milk." He gave it to me in a jug I had. I said I should have it analysed. Defendant said he knew that. On August 31st I received a certificate from the Analyst stating that the milk was adulterated with 10 per cent. of added water. By Mr. Lawson Lewis: I have known defendant for some time as a most respectable tradesman, and was very much surprised to receive this certificate. It was a windy morning and defendant assisted me in sealing the samples. He said, "The milk is all right, but I am in a hurry. I hope you won't keep me long." When I received the result of the analysis, I told defendant. He said that since I had taken the sample he had had reason to believe the milk supplied from the wholesale man was not right. I have taken three samples from the wholesale people. One of them was very much adulterated—to the extent of 20 per cent. of added water. Mr. Lawson Lewis contended that blame attached not to defendant but to the person who sold him the milk. Defendant was sworn, and said that on the day in question he received milk from three wholesale men. He did not tamper with the milk in any way. He did not test it with his lactometer, being so busy in the season. When he returned, after seeing Mr. Ollett, he tested the milk and found it was wrong. The Chairman remarked that the Act threw on the retail vendor the obligation of seeing that he got the right article. Defendant would be fined £1, including costs. Mr. Lawson Lewis said he wished to add his obligations to the Inspector for the exceptionally fair way in which he gave evidence.

Do you want to avoid prosecutions for adulteration?

Read "FOOD AND SANITATION."

Send on your 6s. 6d. to the Publisher, 183, Strand, and get the journal post-free for a year.

IMPORTANT TO YEAST DEALERS.

Beware of adulterated Yeast. You will save yourselves prosecutions and money by reading carefully the advice given in our article on Yeast Adulteration.

THE BACTERIOLOGICAL EXAMINATION OF WATER.

In a report to the Vestry of the Parish of St. Mary, Battersea, Mr. C. E. Cassal says of the "Bacteriological" Examination of Water:—

"In a report of the proceedings at a 'Congress of the British Institute of Public Health,' recently printed and submitted to your Vestry, reference is made to certain papers concerning the 'Bacteriological' examination of water, which were contributed to the 'Chemistry and Climatology' section of this Congress. From the report it appears that the statements made upon the subject were such as to lead to the drawing of erroneous conclusions, and it is therefore important that they should be corrected.

"The assertions that the 'Bacteriological' examination of water 'indicates its condition with relation to disease germs,' and that the 'analytical method' gives the 'past history of a water rather than its present condition,' are entirely devoid of foundation. The so-called 'analytical method' is the only one whereby a knowledge of the actual condition of a water can, at present, be attained, whatever views may be held as to the degree of efficiency possessed by any method for arriving at an accurate knowledge of such condition. There are certain analytical data, which, in addition to affording information as to actual condition, in many cases make it possible for an opinion with respect to 'past history' to be arrived at; but to conclude from this that the analytical method *only* gives information as to 'past history' is obviously and absurdly fallacious. The 'Bacteriological' method depends upon the more or less successful cultivation of micro-organisms and their spores in certain nutrient media such as 'nutrient gelatine' and meat broth, which must be carried out on a minute portion of a sample of water—the minuteness of the amount used militating strongly against its being representative. It is therefore plain that the method does not, of necessity, give the actual condition of a water with respect to organisms, but, if successful, merely what may be obtained from the water by a cultivation process, conducted, not in the human body, but in particular prepared substances and under artificial conditions; while the isolation and recognition of disease producing micro-organisms, from samples of drinking water, namely, of organisms of which it can be definitely said that when introduced into the human body they will produce a particular disease, is a problem with which the 'Bacteriological' method has hitherto shown itself totally unable to cope."

"At present the 'Bacteriological' method affords nothing more than an additional test of a very uncertain and misleading character for the existence of pollution. A water yielding Bacteriological results which, of themselves, would justify its absolute condemnation for drinking purposes, would also yield results by the 'analytical method' which would necessitate its condemnation. To put the matter in a somewhat different form, every water which could be condemned as unfit for use on the results of a Bacteriological test, as now capable of application, would also, of necessity, be condemned on the results of the full 'analytical method' including microscopic examination. On the other hand, in the present state of knowledge, it would be the height of dangerous folly to pass a water as pure and fit for drinking purposes upon negative Bacteriological results alone, that is, upon results which did not indicate that the water would yield a very large number of 'Colonies' of micro-organisms on cultivation, or which did not yield what are supposed to be dangerous organisms; whatever may be said about the rashness of franking waters as *absolutely* safe upon negative results of any kind.

"The paragraph of the Report next to that containing the assertions which I have traversed, demonstrates in a remarkable way the almost ludicrous uncertainty of the 'Bacteriological' method. Sir C. Cameron read a paper 'on a micro-organism, isolated from 'drinking water, which is suspected to have caused an outbreak of enteric fever; and in which he brought forward arguments 'tending to show that a usually harmless germ which is commonly 'found in water, became altered in character and assumed the 'specific form of the enteric fever bacillus. This has been 'suspected before as the cause of sudden and otherwise unaccountable outbreaks of enteric fever.' If Sir C. Cameron's arguments be accepted as valid, they show that an organism usually regarded by Bacteriologists as harmless, and whose presence would therefore not result in the condemnation of the water yielding it, may become highly dangerous, under unknown conditions. Further comment is unnecessary.

"CHARLES E. CASSAL, F.I.C.

"Public Analyst.

"VESTRY OFFICES, BATTERSEA RISE, S.W.

"14th September, 1893."

WILTS COUNTY COUNCIL.

The report of Mr. James Ward, Swindon, Inspector of Food and Drugs, for the six months ending September 30th, 1893, says that the following samples were analysed:—Milk, 64, adulterated 14; condensed milk, 2, adulterated 0; skimmed milk, 1, adulterated 1; butter, 5, adulterated 0; bread, 1, adulterated 0; vinegar, 1, adulterated 1; lard, 3, adulterated 0; whiskey, 8, adulterated 2; gin, 6, adulterated 0; coffee, 1, adulterated 1. Total 92, of which 19=20.65 per cent. were adulterated. Prosecutions 14, convictions 14, fines £19 14s. 6d.; Analyst's fees were also allowed in every case. Two prosecutions stand over for next quarter.

LOOPHOLES IN THE LAW FOR FRAUD.

At Cardiff Police-court, on the 3rd inst., Cornelius Wall, of Heath house, Blackford, Somersetshire, was summoned, at the instance of Inspector Frank Glover, for selling milk adulterated with water to the extent of 15 per cent. on August 13th. Mr. F. C. Lloyd prosecuted and Mr. A. F. Hill defended. A dealer named Walter Allen, of 90, Carlisle-street, Cardiff, was also summoned. Mr. George David (Messrs. David and Evans) defended Allen. In the first case it was stated that a sample of milk had been purchased at the Great Western Railway Station at the time that it was being transferred from Wall, the consignor, to Allen. At this point Mr. Hill successfully submitted that, as the milk was purchased after it had been consigned to Allen there was no case against his client, and the charge was withdrawn. Mr. Lloyd contended that the case against Allen had been proved. The milk on analysis had been found to contain 15 per cent. of added water. Mr. David cross-examined the Inspector, and drew from him the admission that he had no intention whatever of buying from Allen or proceeding against him. He wanted to proceed against the wholesale dealer. The Stipendiary in dismissing the case, said they were, unfortunately, unable to proceed against the real culprit.

DERBYSHIRE COUNTY COUNCIL AND ITS ANALYSTS.

The Weights and Measures Committee recommended that one Analyst should be appointed for the Administrative County, exclusive of the boroughs of Chesterfield and Glossop, to devote his whole time to the service of the Council at a salary of £400 a year, together with necessary railway fares, cab hire, stationery, and postage. The committee expressed their appreciation of the services of the two County Analysts, Mr. Allen and Mr. Otto Hehner, during the long period they had been in the service of the County. The present termination of their engagement was not due to any dissatisfaction with their work, but solely as the outcome of the desire of the committee that the County might have the full services of an Analyst. Considerable discussion ensued, and at length this recommendation was rejected. It afterwards transpired that the Analysts would terminate their engagements in a few days, and the County would then be without an Analyst. It was held that this could not be obviated, although the standing orders were suspended in order that it might be possible to pay the salaries of the Analysts and Inspectors of Weights and Measures.

DEFRAUDING THE ARMY.

At Brecon Police-court, on September 25th, John Perry was charged with selling adulterated milk on September 1st last. Mr. John Williams, Inspector under the Food and Drugs Act for the county of Brecon, said on the 1st September he bought some milk at the Barracks from Samuel Perry, who is in the employ of John Perry, the defendant; he asked him for a pint of new milk, paid 2d. for it, and told him it was to be sent to the Public Analyst. He asked the vendor if he should divide it, and he said yes; he then divided it into three parts, gave one sample to the vendor, kept one himself, and sent the third in a sealed bottle to the Public Analyst. The analysis stated that out of a 100 parts, 45 parts were pure milk, and 55 parts skim milk, or in other words it was deficient in butter by at least 55 per cent. The result had been brought about either by partial skimming, or by mixing skim with the fresh milk. The Bench: As a matter of fact, it was not half the strength of pure milk. Mr. John Williams: That is so. The Bench: Can you give the results of previous analysis? Mr. John Williams: On January 13th, 1892, the defendant was before the Bench and the sample was made up of 90 parts pure milk, and parts skim. He was then let off with a caution. On June 17th, 1893, he was before this court and the sample was made up of 72 parts pure milk and 28 parts skim milk. Mr. Perry: Were you sent for to the Barracks? Mr. John Williams: I was sent for and went there by the desire of the Colonel. Mr. Perry: How much milk was there in the tin you took the sample from? Mr. Williams said there were two tins; one was nearly full; he wanted me to take the sample from that one, but I objected and took it from the one in which there was only about a quart. He had just returned from the cook's house. Mr. Perry: Did you take all he had? Mr. Williams: I think there was some left. Mr. Perry addressing the Bench, said that if milk were left in the tins for three or four hours, the smallest quantity of cream would be at the bottom. The Mayor: Do you suggest that the water would work in from the bottom of the tin? In answer to the Bench, Mr. John Williams said that the milk was supposed to be of the finest quality. Mr. Perry, in defence, said that their Worships would be aware that through the dryness of the season there was a great scarcity of milk; he had been called upon to supply a large quantity of milk to the Barracks (for which he was contractor) on short notice, and he had sent out to the country and bought it. The Bench said the question they had to deal with was that the milk was 55 per cent. below what it ought to be; if Mr. Perry could explain why it was so, it would be all right. The question of his supplying the Barracks on short notice had nothing to do with it. The Bench then retired for a short time, and on their return the Mayor said they had given the case most careful consideration, and Mr. Perry should consider himself most fortunate that the full penalty of £50 was not inflicted. He had been before them three times, and it had been most properly said that milk was purchased as a food, and there was no excuse for him. He would be fined £5, and costs 35s. 6d., or two months, and, if there was another case against him, the full penalty would be inflicted. The defendant was given fourteen days to pay the fine.

11s. FOR WATER ADDED TO PAUPER'S MILK.

This is how Cokermonth Jay P.'s encourage adulteration and stultify the Acts. At the Cokermonth Police-court, on October 2nd, before Mr. W. L. Alexander (in the chair) and Canon Sherwen, Sarah Christopherson, farmer, Papcastle, was charged with having, on the 29th ult., sold milk which was not of the nature, quality, and substance demanded by the purchaser. Mr. Paisley appeared for the defence. Sergeant McKay stated that on the 29th ult., he purchased a pint of new milk from George Stevenson, who was in the employ of Miss Christopherson. The milk was obtained outside the workhouse, as it was about to be delivered. He told the lad he wanted the milk for the purpose of analysis, and he divided the milk into three parts, giving one part to the lad, and the other two to Superintendent Johnstone. By Mr. Paisley: He went with Superintendent Johnstone to Papcastle on the 8th September, when another sample was taken. Superintendent Johnstone said that on the morning of the 29th, the last witness handed him two parts of milk, and he took one to the Public Analyst. On the 8th ult. he went to Miss Christopherson's and saw the cows milked, and got another sample. He produced the certificates referring to the analyses. That relating to the sample obtained on the 29th showed that the milk contained nothing injurious to health, but it had been diluted to the extent of 11·8 parts of water to 100 parts of new milk. Mr. Paisley said it was difficult to understand the variations with regard to the chemical composition of milk. There was not the slightest doubt that milk varied from time to time, and that it depended upon the food of the cattle and the state of the weather. At least that was the experience of farmers and those engaged in the milk trade. The question was whether the excess of water had been added, or was due to natural causes. Miss Christopherson had been supplying the workhouse with milk, and the officials had never made any complaint. The workhouse master had praised the milk, and the Local Government Board Inspectors had tested it, and no fault had been found with it. John Tremble said that only three gills of water was used for twenty to twenty-five gallons for rinsing. No other water was ever added. There were variations in the milk on account of the food of the cattle and the weather, and cows varied a good deal. The Chairman said the Bench thought the milk contained more water than should have been there. But this being the first offence, they would do no more than order the defendant to pay the costs, which amounted to 11s.

The pauper's lot in Cokermonth [is evidently] not a fatty one.

At Bath, on the 16th, Ann Salter, of Lower Swanswick, was summoned for selling coffee with 30 per cent. of chicory, on the 28th of August, and admitted the fact. Police-constable Brunt bought the coffee in question, and paid 3d. for a quarter of a pound. She was fined 10s. and costs.—William Clark, grocer, of Twerton, was summoned for a similar offence, the amount of chicory in this case being 40 per cent. Two ounces were purchased by Police-constable Cross. Defendant said he sold the coffee as received from the wholesale manufacturers. The Bench considered this a clear case of adulteration. At the price defendant had asked the public had a right to expect a genuine article. He would be fined £1 and costs.

James Nichols, grocer, 154, Quarry-hill, Leeds, was summoned at Leeds Town Hall, on the 26th ult., charged under the Food and Drugs Act with having sold adulterated milk. Mr. Walter Burgess Walker, Inspector, stated that he bought a pint of milk from defendant's wife, and that Mr. Fairley, the City Analyst, had certified it to contain 16 per cent. of added water. Defendant denied having watered the milk. After hearing the evidence, the Bench said they did not believe that defendant had adulterated the milk; but he was the responsible party, and he was fined 20s. and costs.

At West London Police-court, on the 21st of September, George Saw, of High-street, Acton, was summoned by Mr. Tyler, the Inspector, for selling milk adulterated with 8 per cent. of water. Fined 10s., with 12s. 6d. costs.

Leon Jones, of Finborough-road, South Kensington, was summoned for selling milk containing 25 per cent. of added water. The defendant disputed the correctness of the analysis, and wished to have the milk further analysed. Adjourned for that purpose. John Jones, of Lancefield-street, Queen's-park, was fined 30s., with 12s. 6d. costs, for selling milk containing 10 per cent. of added water.

At Bath, on September 16th, Worthy Bedford, of the Railway Inn, Twerton, was summoned for selling a pint of whisky 32 per cent. under proof, on the 28th ult. Mr. Herbert Clark, who defended, relied entirely on the notice of dilution which the landlord said had been up for years, and was six feet from the policeman's nose when he was served. Defendant, his wife, and ex-Sergeant Edwards, were called as to this point, and the case was eventually dismissed.

At Wakefield, on the 22nd, Fred Brooke, of the Cook Inn, Alverthorpe, was charged with selling adulterated gin and whisky. Mr. Talbot Kyle, Inspector of Food and Drugs, appeared in support of the two summonses. There was practically no defence. The Bench ordered Brooke to pay £2 5s. 6d. in one case and £2 8s. 7d. in the other, or together £4 14s. 1d., or two months' imprisonment.

HASTENING TOWARDS THE AGRICULTURAL MILLENNIUM.

The West Suffolk County Council recently offered to establish three agricultural scholarships of £30 each at Cambridge University, but although the proposed scholarships were well advertised, not a single applicant sent in his name. An offer of two scholarships of £40 each in silk manufactures, at Manchester, met with a similar fate.

CORK BUTTER MARKET HUMBUG.

If the Cork Butter Market Trustees want to make the sale of Irish butter in England as extinct as the Dodo, they are going to work in an excellent way to achieve that result. Here is a case in which butter contained 11 per cent. more water than ought to be present in it. Mr. R. N. Byrne (who ought to know what this excess-water game has done in ruining the Irish butter industry) asked that a *small fine* should be imposed, and the Magistrates were sufficiently asinine to adopt his suggestion. With evidence like this before us we must refuse to believe that there is any real desire in Cork to suppress the excess-water in butter swindle. We have watched with keen interest the development of the movement to suppress adulteration in Ireland, the more so as we have ourselves striven, in season and out of season, to give fair play to Irish produce in English markets. We have come to the conclusion that, many as are the wants of Ireland, the most pressing in its butter industry is honesty, and after that, organisation and brains to produce as good an article as the Dane and Swede or the Breton makes. Until Irish butter makers get at least the first of these requisites, we would counsel consumers to rather purchase a clean, healthy margarine, with a 12 per cent. water, well made from good fats, than to be swindled by 23 to 33 per cent. watered butters, carelessly made, and of quality varying in every batch. Readers of the following can form their own conclusions as to the amount of interest Cork manifests in suppressing butter adulteration:—

At Cork, on the 19th, (Before Major Lyons, Mr. Mayne, R.M., and Alderman Flavin), a farmer named Alexander Hallisey, residing at Kilmacrogue, in the county of Cork, was prosecuted at the suit of the trustees of the Cork Butter Market, for having on the 3rd. of the present month, sent to the Cork Butter Market for sale or inspection one firkin of butter, which butter contained an undue quantity of water, which was placed in same for the purpose of fraud. Mr. Thomas A. Forrest, Superintendent of the Butter Market, deposed that on the date in question his attention was called to a firkin of butter. The owner of it, the defendant, was present, and he (Mr. Forrest) said that it was fraudulently made and that he should take a sample of it. He did take a sample of it, which he sent to the Analyst and to the trustees. Mr. Harrington found that it contained 23·20 per cent. of water. He (Mr. Forrest) should say it contained six or seven pints of water in addition to the natural moisture. It appeared to be good butter with the exception of the water. Alderman Walsh, butter merchant, said Hallisey was surprised to find that there was water in his butter. He had been dealing with him for twenty years, and there had never before been a complaint against him. Mr. R. N. Byrne, solicitor, who appeared for the Butter Market Trustees, asked that under the circumstances a small fine should be imposed. Major Lyons thought the trustees ought not to be blowing hot and cold in those cases—at one time asking for a heavy penalty and at another for a light one, but should try and uphold the market and keep to its rules. The defendant was then fined £2 and costs, and the butter was ordered to be forfeited.

ST. LUKE'S VESTRY AND SOMERSET HOUSE CHEMISTS' INCOMPETENCE.

At a meeting of the St. Luke's (Middlesex) Vestry, the Chief Clerk brought up a draft petition to Parliament for an inquiry into the working of the Food and Drugs Act. It sets forth that the Vestry, being the authority under the Food and Drugs Act of 1875, and of the Margarine Act, 1887, labours under certain disadvantages in administering those Acts in the interests of the parishioners. (1) That there is no compulsion upon local authorities to take samples for analysis; (2) the necessity of proving intent; (3) that the compulsory parting of samples into three renders the Act inoperative so far (say) as regards seidlitz powders; (4) that they do not consider the authorities at Somerset House a satisfactory court of reference, the standards and methods of analysis for natural articles being unknown, and also because it has lost the confidence of the general body of analysts; (5) that in the opinion of the Vestry a court of instructors, under Government supervision, with power to investigate, discover, and approve processes of analysis, and to suggest standards of analysis, is highly desirable; (6) that in the case of a defence of warranty being set up it be competent to summon the wholesale and the retail dealer together, and thus diminish the difficulties of getting a conviction; (7) that there is a serious want of uniformity on the part of Magistrates with regard to penalties and in the mode of dealing with purely technical points; and (8) that the Local Government Board should contribute to the cost of Analysts' salaries. Other vestries of the metropolis will be asked to support his petition.

IF YOU SELL A GENUINE ARTICLE

LET THE PUBLIC AND THE TRADE KNOW IT. ADVERTISE IT IN "FOOD AND SANITATION."

Retail Traders study FOOD AND SANITATION to know what Food Stuffs they can sell without risk of prosecution.

The Grocer who does not subscribe to FOOD AND SANITATION, places himself at the mercy of unscrupulous wholesale dealers. FOOD AND SANITATION costs only 6s. 6d. yearly, post free, and has saved its readers from many prosecutions. Send on your 6s. 6d. at once, and begin with the New Volume.

Subscribers should address, PUBLISHER,

"FOOD AND SANITATION," 183, Strand, London, W.C.

IMPORTANT MERCHANDISE MARKS ACT PROSECUTION.

The following case reveals only the fringe of a system of trading that has been hitherto carried on with impunity in well nigh every centre of industry in the United Kingdom. It has long been a mystery why the Chambers of Commerce of Leeds, Huddersfield, Bradford, and other important towns have winked at imposition upon the public and unfair competition against manufacturers of genuine articles. Some years ago Mr. C. E. Casal advocated the extension of analysis to, amongst other things, stuff and woollen goods. Were such analyses to be generally made, it would be found that the defendants in the present case are not alone in vending as "Natural Wool" articles containing only 41 per cent. of wool and 59 per cent. cotton. But for divers reasons, mainly, if the truth must be told, because influential leaders of the various Chambers of Commerce themselves practice the imposition and benefit by it, a prosecution for this class of offence is as rare as a white blackbird. It is here that the Board of Trade, if it had a Minister worth his board and lodging in place of the political platitudinarian who swoops down upon a salary of £2,000 per year, for groping in a political morass instead of looking after the interests of English trade, might earn the colossal amount of public money now wasted in prolonging its idle, useless existence. At present the Merchandise Marks Act is practically a dead letter, so far as prosecutions for fraudulent or false marking in England are concerned. No individual trader can, without placing himself in a very invidious light before his fellow traders and the public, institute a prosecution. Chambers of Commerce will not do so for reasons already stated, and as the Board of Trade is profoundly ignorant of any matters that would really benefit English trade, and cares only to be let alone and get its salaries regularly, the Merchandise Marks Act has been a farce ever since it became law. It is the English traders' own fault in sending wretched political hacks to the House of Commons in place of English business men. Now that a move has been made in Nottingham to enforce the Acts, let us hope it will not stop at this case, but be carried out consistently and with energy against all offenders under the Acts, not only in stuffs and woollen goods, but in American and other foreign bacon and hams now being sold in enormous quantities by unscrupulous traders—some of them members of Parliament—as English and Irish. In this present case—practically an epoch-making one in the hosiery trade—

Thomas Henry Downing, was summoned, at the Leicester Borough Police-court, at the instance of the Board of Trade, on the information of Richard Henry Beaumont, secretary of the Nottingham Chamber of Commerce, charged with various breaches of the Trades Marks Act. There were ten summonses, the essence of the charges being that the defendant applied, with intent to defraud, a certain false trade description, to wit, "natural cashmere," to dresses, wool vests, &c., and that he sold the same. Mr. W. T. Raymond, barrister, prosecuted on behalf of the Board of Trade, and Mr. A. Toller appeared for the defendant. Great interest was manifested in the proceedings, and the court was filled by manufacturers. Mr. Raymond, in opening the case, stated that in the early part of the year goods were ordered from Messrs. Downing and Co. by a Mr. Roe, of Nottingham, in the name of E. P. Young and Co., Nottingham. Mr. Roe had the goods examined, and he found that they were not according to the particulars contained in the invoice. He communicated with the Nottingham Chamber of Commerce, and they called the attention of the Board of Trade, who determined to institute the prosecution. The offence was complete by the application of any trade description which was false in any material respect as regards the goods to which it was applied. He produced the invoice of the goods and also the Spring price list issued by the defendant, and No. 518 was described as "women's undyed natural wool vests and combination dresses." And No. 518 appeared on the invoice. Dr. Dupré, of the Analytical School, Westminster, said he analyzed the goods sent to him by the Board of Trade. The goods bore a printed label, "Hygienic underclothing; women's natural wool vests. No. 518." He examined the fabric with the microscope, and found that it was composed of cotton and wool. He produced a portion of the fabric as received, another portion from which all the wool had been removed, leaving only the cotton, another from which all the cotton had been abstracted, leaving only the wool. He further produced a piece of fabric which he had dyed with a substance which would dye wool only, and the cotton in the fabric remained white. The proportion of wool and cotton was 59 per cent. cotton and 41 per cent. wool. Formal evidence having been given as to the purchase of the goods, Mr. William Roe, of the firm of Messrs. Cooper and Roe, hosiery manufacturers, Nottingham, said the goods were described in the invoice and on the label attached to the goods by the words "Sparkenhoe hygienic underclothing; women's natural wool vests. No. 518." He tested the vests and found them made of cotton and wool. There was more cotton than wool in the fabrics. He expected to receive all-wool vests, goods described as "natural cashmere." Goods described as natural wool ought to be made of all wool; natural wool had been known as such since the Health Exhibition of 1884. In cross-examination the witness was asked, "Did everybody who bought such goods at low prices know that they were composed of 'natural and vegetable wool'?" Witness replied that

he did not know what vegetable wool was, and Mr. Toller offered to produce the price lists of the leading firms in the kingdom to show that it was a custom of the trade, but this was overruled. Mr. Thomas Gascoine, hosiery manufacturer, said "natural wool" should be wool only. Cotton and wool spun together were merino, and the goods purchased ought to have been described as "merino." Mr. W. A. Wale, one of the directors of the Nottingham Manufacturing Company, gave similar evidence, and said the goods were merino and not "wool." Dyed wool was used to produce what was known as "natural" wool, but only wool was used. Several other manufacturers from Nottingham and Leicester were called. Mr. Arthur Davis, hosiery manufacturer, said he always understood natural wool to mean wool of a natural shade. In cross-examination witness said that between manufacturers and merchants low-priced natural wool was understood to be an admixture of cotton and wool. The same thing applied to cashmere. The word "natural" simply had reference to a shade, and covered both dyed and undyed goods. Re-examined, witness said it was well understood that below a certain price natural wool contained an admixture of cotton and wool. Mr. Toller addressed the Bench for the defence, and the case was adjourned. In the end the defendant was fined £5 and costs.

A FOOLISH AND RIDICULOUS MAGISTRATE.

Amongst magisterial enemies of society, with respect to whose mental fitness for their positions an enquiry ought, in the public interest, to be held, there is none that we know of who has so consistently outraged law and sense in the same degree as Mr. Biron, Q.C., Police Magistrate at Lambeth. His ignorant decisions have encouraged thievery by milk swindlers, by margarine as butter rogues, in fact by the entire class of knaves who rob the poor in the meanest of all mean ways by food adulteration. The authorities who have tried to suppress adulteration have found him a persistent enemy, and, however grave the offence, he seems to have a mental twist in favour of the infant starver, or light-weight rogue. Those who know this peculiar magistrate's record will not be surprised, therefore, that Mr. Biron should champion against law and fact the attempt of the Tramway Companies to extract an extra 33½ per cent., in the way of fares, illegally. By the law Tramway Companies are compelled to have a fixed board, inside and outside, with the fares to be charged legibly written. A London Tramway Company evade this law, and, at a time when a few extra pence can be gleaned from theatre-goers, put up a board marked "stables only," and demand payment for a journey for which the fare is not as the law demands it should be, viz., displayed. The object is a plain one, being to run the passengers a portion of the way, make it necessary for them to alight and obtain another tram, for which the total fares reach 3d., instead of 2d. charged during the day for the entire journey without any break. But Mr. Biron refuses to consider the law or the fact, permits no common sense to step between him and his consistent folly, and deliberately goes out of his way to stifle the case, and insult outrageously a gentleman who, for refusing to pay the Tramway Company's illegal demand, was, apparently, further given illegally into arrest. Mr. Biron used the phrase "foolish and ridiculous person" in relation to a gentleman who, whether right or wrong in his contention, had the privilege of an appeal to the legal tribunals of his country. We never thought much of Mr. Biron's law, and we now think less of his manners, but the phrase "foolish and ridiculous person" should not be lost. Mr. Biron himself has so repeatedly earned it that we feel he should not be deprived of it. But is it not time that Mr. Biron's vagaries were the subject of an enquiry?

WHAT SOME CONFECTIONERS USE.

At Clerkenwell, on the 17th inst., Patrick Sullivan, a cheesemonger, of 79, Caledonian Road, was summoned by the Islington Vestry for having in his possession, and for purposes of sale, six tubs of butter, four cheeses, and 16 barrels of eggs, which were unsound, unwholesome and unfit for human consumption. Mr. Rickett appeared for the defence, and contended that the articles seized by the Inspector had been set aside by the defendant as unsaleable. The weather at the time was very warm, and perishable articles turned very quickly. Defendant sold as many as 30,000 eggs a week; and if he sold bad eggs he would soon lose his customers. Every egg was carefully examined before being sold. Defendant was called and cross-examined by Mr. Lewis, solicitor, who prosecuted, and admitted that his boy did say to the Inspector, "Don't take those cases of eggs; they have been sold to a confectioner." He, however, did not deal with confectioners. The person who cleared away the waste might sell the eggs to the confectioners. George Bowman said he collected the waste from the defendant's shop. Some of the eggs he took away he could sell to confectioners, and others to leather tanners. Samuel Isaacs, a lad in the defendant's employ, said that two of the cases of eggs seized by the Inspector had been sold to a confectioner in Chapel-street. Mr. Bros inflicted a fine of £10 and costs.

What with poisonous colours, glucose, and rotten eggs, the confectionery trade is coming to a pretty pass.

Do you sell a genuine article? If so, Grocers won't believe you do if it is not advertised in

"FOOD AND SANITATION."

AND WE VERY MUCH FEAR SO TOO.

At a meeting of the Limerick Corporation on the 15th, the question of the appointment of a City Analyst was adjourned to a fuller meeting of the Council. The Mayor said there could be no doubt that they wanted a City Analyst, and the expenses to the city would, after all, be only trifling. They had offers from some of the most competent men in England at salaries that would astonish them. They had an offer £30 a year from the butter buyers, and the only obstacle in the way of their getting other promises was that the outside public were afraid they would not appoint the right man.

If the Limerick Corporation appoint any of the applicants who offer to do the work at sandwichmen's rates, we feel certain they won't get the right man, however eminent they may be deluded into believing such applicants to be. If they be wise they will pay a proper salary, placing whoever they appoint above the reach of temptation.

THE WARRANTY AGAIN.

On the 17th, at the Clerkenwell Police-court, before Mr. Bros, Henry Edwards, of 2, Roman-road, was summoned, at the instance of the Islington Vestry, for selling, on July 14th, a pint of milk which was found, when analysed, to be adulterated with 20 per cent. of added water. Mr. Ricketts, solicitor, who appeared for the defence, produced a warranty from the wholesale man, and called evidence to prove that the milk had not been tampered with since its delivery to the defendant. Mr. Bros dismissed the summons.

Here the adulteration is not disputed, but the retailer escapes punishment, and the public, who are paying milk price for a 20 per cent. added water concoction, have absolutely no protection whatever, owing to the law's stupidity.

NORFOLK COUNTY COUNCIL AND ADULTERATION.

The report of the Public Analyst upon the articles analysed by him under the Sale of Food and Drugs Act, 1875, during the quarter ending the 30th September, 1893, showed that the total number of samples analysed during the quarter was 34, of which six were adulterated.

PRISON FOR ATTEMPTING TO BRIBE AN INSPECTOR.

At Dublin, on October 19th, Patrick Devitt, who sought to bribe Mr. Timothy Lyons, Food Inspector, by handing him a sovereign to quash a prosecution, was sentenced to one month's imprisonment.

BEWARE OF SO-CALLED GUINNESS'S STOUT.

Last week, at Thirsk, Thomas Tweedy, a brewer, was summoned for applying a false trade-mark to "Guinness's Extra Stout," at Carlton Miniot, on September 9. According to the Analyst's certificate, nearly 8 gallons of water had been added to 36 gallons of the stout. The defendant was fined altogether £24.

REPORTS AND ANALYSES.

WILLIAM HOLBROOK'S DIATROPE SCREW PROPELLER
EGG BEATER, 2, High Road, Upper Clapton, N.E.

The inventor of this ingenious machine says:—

"It is intended for all processes of mixing, whether it be summer drinks, whites of eggs, soft fruits, paints or ointments."

The price ranges from 3d. to 1s. 6d. each, and after testing it we can quite bear out the inventor's statement, that it is the quickest egg beater ever known. It would be found very useful by chemists as well as in the household.

CORRESPONDENCE.

JAM ABOMINATIONS.

To the EDITOR of FOOD AND SANITATION.

SIR,—I shall be glad to know why we have not heard of any jam prosecutions lately, although so many vinegar cases have been before the courts.

I purchased, a few days since, a lot of Scotch jam, and I am convinced that a large percentage of it consisted of glucose, and I am informed that very large quantities of this article are used by many of the preserving houses. Is not this article an adulterant?

Plymouth, Oct. 21.

Yours, etc., A. N.

[The question of jam adulteration, glucose, etc., has been engaging our attention, and will be dealt with as thoroughly as vinegar has been in a few weeks.—ED.]

POWELL'S BALSAM OF ANISEED—FOR COUGHS.

Powell's Balsam of Aniseed—Coughs and Asthma.

Powell's Balsam of Aniseed—Coughs and Bronchitis.

Powell's Balsam of Aniseed—Coughs and Hoarseness.

Powell's Balsam of Aniseed—Coughs and Lung Troubles.

Powell's Balsam of Aniseed—Coughs.—Safe and Reliable.

Powell's Balsam of Aniseed—Coughs.—Established 1824.

Powell's Balsam of Aniseed—Coughs.—Refuse Imitations.

Powell's Balsam of Aniseed—Coughs.—Sold by Chemists.

Powell's Balsam of Aniseed—Coughs, Night Cough, Influenza.

Powell's Balsam of Aniseed—Coughs—Relieved Instantly.

Powell's Balsam of Aniseed—Coughs.—The Oldest Remedy.

Powell's Balsam of Aniseed—Coughs.—Trade Mark.

Powell's Balsam of Aniseed—Lion, Net, and Mouse.

Powell's Balsam of Aniseed—1s. 1½d., 2s. 3d.

YEAST ADULTERATION.

To the EDITOR of FOOD AND SANITATION.

SIR,—Your article upon yeast adulteration alarmed me. I have been selling yeast, of which I take the liberty of sending you a sample, in large quantities. It is somewhat cheaper than Dutch yeast I used to sell, but I am given to understand that is on account of it being made by a patented, cheaper process. I would be glad if you would analyse it for me, and say if I am safe in selling it as pure yeast.

Leeds.

DEALER.

[The patented cheaper process in the yeast sent appears to be merely a large admixture of potato. We would recommend "Dealer" to have a full analysis made by the Leeds Public Analyst, and if he has been buying the stuff as pure yeast he should prosecute the person from whom he purchased it for fraud. We would again point out to readers that we do not care to undertake analyses of any kind, and that wherever there is a local Analyst, such work should be entrusted to him. We have a strong objection to the analytical blacklegging done by trade journals for ridiculous fees, and whilst we are at all times anxious to oblige our readers we would rather they did not send us samples for analysis: if there be a Public Analyst or a practising Analytical Chemist in their districts.—EDITOR.]

FOOD AND DRUG ACT INSPECTOR'S QUERIES.

Query.—SIR,—The usual price paid for new milk in this district is 5d. per quart. On purchasing a pint for analysis recently, I was charged at the rate of 6d. per quart, only because I was known to be an officer under the Adulteration Acts. If on a future occasion I should tender 2½d., being the usual price for a pint of milk, and the offer is refused, can I proceed against the vendor for refusing to sell under Section 17, 1875 Act.—Yours faithfully,

J. H. C.

Answer.—It would depend upon the construction put on the words "not being more than shall be reasonably requisite." If the vendor demand 6d. per quart and a less amount be tendered, it is doubtful if a prosecution under Section 17, 1875 Act would be successful.

Query.—An Inspector of Food and Drugs enters a public house bar, and asks for a shillingworth of whisky from a certain bottle, which is refused, with the reply that "it is not for sale," but other whisky is offered him. Can the Inspector in such a case, after stating who he is and tendering the money, demand a particular sample for analysis?

J. W.

Answer.—Yes, and if the keeper of the public house then refuses to supply the Inspector, the Inspector can summon the publican for refusing to sell for analysis. In previous issues of FOOD AND SANITATION, J. W. will find several such cases reported.

At the South Shields Petty Sessions, on October 3rd, Elizabeth Edmunds, shopkeeper, Hebbury, was summoned for selling vinegar diluted by 90 per cent. Mr. John Newby, the Inspector under the Hebburn Local Board, said he purchased a pint of vinegar from the defendant, and sent a portion of it to the County Analyst. He produced his certificate, which stated that the vinegar was diluted with acid to the extent of 90 per cent. Defendant said she was not aware of the vinegar being adulterated. She sold it as she received it. The Bench believed that the defendant had acted in good faith, and only fined her 5s., including costs. They were of opinion that the makers of the vinegar were the people who ought to be punished.

At the West Riding Police-court, at Wakefield, on October 6th, Messrs. Bailey and Foster, grocers, were charged with selling adulterated vinegar. Mr. Hiley, from the offices of Mr. Trevor Edwards, the West Riding Solicitor, appeared to prosecute, and Mr. Lodge defended. It was alleged that defendants had sold as malt vinegar a liquid which Mr. Allen, of Sheffield, the West Riding Analyst, certified to be acetic acid diluted with water and coloured in imitation of vinegar. It was said to possess not more than 20 per cent. of the article commonly known as malt vinegar. Mr. Lodge, in defence, urged that the vinegar had not been adulterated in the least, that it was sold in the state in which it was bought from the Worcester Preserving Company (Limited), who guaranteed all their vinegars to be absolutely pure, and were willing to fight this case. At the request of Mr. Lodge, the Bench adjourned the case for a fortnight.

WARNING TO GROCERS.

Buy no vinegars that are not advertised in FOOD AND SANITATION. No matter how specious the promises, resist any inducements to deal with firms whose announcements do not appear in this Journal. You will then avoid prosecutions, convictions, loss of time, money, repute, and business.

GUARANTEED ABSOLUTELY PURE.

SICILIAN WINE VINEGAR.

Warranted to stand any Analytical test. A natural product ensuring perfect digestion not possible in the various manufactured Acetic compounds.

Can be supplied in bulk.

Write for Samples and Price to Sole Proprietors:—
72, Mark Lane, London, E.C.

READ & DIGHT.

busy booming another wondrous remedy—a supposed cure for drunkenness—and is finding leading daily journals foolish enough to allow him to dupe them into furthering his schemes. In a letter to the *Daily Chronicle* Mr. Stead makes the following statements:—

THE EDITOR OF THE DAILY CHRONICLE.

SIR,—Some two months ago, you were good enough to enable me to appeal through your columns for half-a-dozen drunkards, upon whom I wished to test the efficacy of a new remedy for dipsomania. My appeal was quoted throughout the Press of the world to an extent which showed the wide-spread interest excited by a proposal to subject to an experimental test a claim of such vital importance to our social well-being. For some days I was inundated with offers of typical cases, and the correspondence which rained in upon me from all parts of the three kingdoms, bore eloquent testimony to the widespread misery which intemperance has established in the atmosphere of so many homes.

Out of these cases a selection was made of eight, whose record, both from the point of heredity and of persistent hard drinking, would stand the severest test. A furnished house of a professional gentleman was taken near the British Museum, and there the sample drunkards were installed, and the experiment began.

The treatment commenced on September 11th. The experimental month expired on October 12th. Our patients were four women and four men. Three of the women were either married or were widows; one was a spinster. Of the men, two were commercial travellers, one a solicitor, the other an ex-naval officer. One of them came to us guaranteed as one of the worst cases known to the Church Army; another equally certificated from the Salvation Army; while the others were accompanied by equally satisfactory certificates as to their thorough-paced drunkenness. A fully qualified man was placed in charge, and competent assistants were secured, who saw to it that the remedy at the beginning was administered at the stated intervals of three hours, both night and day.

Of the nature of the remedy I can say nothing, excepting that it is extremely bitter to the taste, and acts as a very powerful tonic. After the patients had been under treatment for ten days I visited the place and interviewed each separately. A marvellous change had already been effected, but I decided to say nothing until the month expired and I had the final report of the medical men upon the result of the treatment. That report is now before me, and I owe it to the public to lose no time in stating the result of the experiment.

That result has been an almost unqualified success, the only exception being one woman who, it is believed, did not conform to the regulations laid down. Of course, it is as yet too early to say anything as to the lasting effects of the cure, although, judging from the experience of other cases which were treated nearly twelve months since, and are still standing, I do not think there is much reason to fear but that the cure is as permanent as it is certainly drastic; indeed it might not almost be described as miraculous.

For what has happened? Seven poor miserable wrecks, drenched with whisky or soddened with gin, and in some cases with an additional craving for morphia and laudanum, have been in one short month so completely weaned from all desire for alcohol that they may be trusted to go through the most tavern-spotted thoroughfare without feeling the slightest inclination to resume their potations. Nay, more, not only has all craving for drink been killed in their system, but in its place there has been developed an absolute hatred and loathing for intoxicants, a loathing so acute that some of our patients have walked down the middle of the street rather than use the footpath which led them too close to the reek of the tap-room.

One habitual toper, after having been under treatment for less than a week, was allowed to go out by himself, and almost automatically he found himself entering the door of the familiar tap-room in the neighbourhood of the House of Commons. As he pushed the door open, he was suddenly recalled to a sense of where he was, and what he was doing by the whiff of the alcohol-saturated atmosphere of the bar. He had a pipe in his mouth, but he could not draw another whiff, so sudden and so intense was the nausea that seized him.

This is only one of many similar cases. A positive nausea, approaching sometimes to violent sickness, is produced by the smell of the drink. One of the patients solemnly assured me that he felt inclined to retch wherever he saw the word drink, or heard the word bar, but I did not put him to an experimental test, so that statement must pass for what it is worth. Questioning the patients closely, they all told me the same story; namely, that they had been drinking hard before they came in. One of them arrived in a state of delirium tremens, thinking that the cab was full of snakes. Another had been sleeping out of doors in the London streets for two days before he found shelter in the institution, and he had almost to be parboiled, before he was clean enough to be taken in.

When the treatment begins they all experience a certain degree of discomfort, which varies, sometimes from acute headache to feverish ague. For a couple of days they are about as miserable as they can be, but on the third day the headache leaves them, the sickness disappears, and they begin to develop an appetite. Before they have been under treatment a week they can be allowed to go out freely without any danger of their breaking loose, or resuming the habits which had made such a wreck of their lives. The craving for drink, so far as can be seen from the close observation of the cases under treatment, is absolutely dead, and, so far as can be seen at

present, those who have conducted the experiment are more than satisfied with the result.

The remedy which has wrought such wonders is, I believe, a concoction of South American origin. The secret of its manufacture remains with one man, who refuses to divulge it, but who has authorised Mr. A. J. L. Gliddon, of 18, Pall-mall East, S.W., to dispense the remedy under strict conditions as to its application.

May I ask any of your readers who wish for further particulars to apply to Mr. Gliddon instead of writing to me. My part in the matter is finished, and thanking you for the opportunity which the publicity of your columns has afforded me in carrying out this experimental test, I am, yours very truly,

W. T. STEAD,
The Review of Reviews.

Mowbray House, Norfolk-street, Strand,
W.C., October 28th.

This letter needs, in the public interest, some consideration. No. 18, Pall-mall East, is the office of the Mattei Elettricità Bianca, Elettricità Verde, and Elettricità Rosa remedies, which Mr. W. T. Stead in 1891 lauded as the greatest scientific discovery of the age, and vouched for as he now vouches for the alleged cure for drunkenness in the *Daily Chronicle*. What did these wondrous electric remedies prove to be? One might laugh at the result were it not that the swindle has been far-reaching, and that thousands of the persons who have ignorantly followed Stead for years, did what the charlatan calculated, and echoed the virtues of the so-called cancer cures from end to end of the United Kingdom, and established another quack swindle firmly in the land, for the Cancer Cure Electricities possess no electricity whatever. They are sold at 3s. 9d. per bottle to the dupes of the Mattei swindle, and are nothing other than distilled water. Out of this fraud Count Mattei makes a profit of some £100,000 per year, and it is another genuine philanthropist, the one who vends the Mattei swindle who is to vend the wondrous cure for drunkenness under strict conditions as to its application. We have to express our surprise that a journal of the standing of the *Daily Chronicle* should with the evidence of the Mattei swindle before it, open its columns to free advertisement of what, upon its face, bears the impress of being another imposture. If the *Daily Chronicle* does not know the facts of the Mattei imposture it ought to inform itself of them, and not lend its editorial, as well as its news columns to the furthering of schemes of a nature quack. It is not our intention to probe the motives of Mr. Stead in this new humbug. No doubt he will swear he is disinterested in the financial possibilities of the new quack nostrum, as he would doubtless swear he was in the puffing of the Mattei swindle. Those may believe him who choose. It is our wish to chronicle merely the facts of the Mattei swindle, to show that the so-called drunkenness cure is being worked from the same establishment, and to warn the public against an imposture, for, needless to say, we do not believe one jot in Mr. Stead's mysterious experiments. We only think it a pity his cant should find its way into print.

BEDFORD'S DOGBERRY AGAIN.

At the last report of the Bedford Town Council, the Mayor, in discussing the fact that the Public Analyst's report stated that no articles had been submitted for analysis, said the committee felt that it was useless to send up articles for analysis because the return was always the same—that the articles were correct and free from impurity.

We sympathise with you, your Washup. There's no fun in sending samples if you are not allowed to indulge in little jokes with poisoned beer, and make a farce of Acts intended for the public protection. But there is something far more useless than the sending of articles for analysis, and that is the existence of yourself and your fellow numbskulls of the Bedford Corporation in positions for which you have not the qualification of one atom of fitness. It is a disgrace to Bedford that the public should be plundered, the honest grocer injured in his trade by the encouragement your idleness and ignorance gives to all who practice fraud in food stuffs, and in our opinion it is high time your fellow townsmen spoke out plainly upon this scandal.

SHROPSHIRE AND ADULTERATION.

Our contemporary, the *Salopian Post*, is evidently a go-ahead journal, in its issue of October 28th, it says:—

"The Food and Drugs Act appears to be practically a dead letter in Shropshire, for, according to a recent report of Captain G. Williams Freeman, the Chief Constable of the county, only eight samples were ordered to be taken during the quarter ended June 30th. Of these, three samples of coffee were analysed, two were genuine, and one adulterated; three of butter, two genuine and one adulterated; one of gin, adulterated; one of whisky, genuine. Proceedings were taken against two persons, which resulted in conviction in both cases. In the quarter ended September 30th, only seven samples were taken, and one conviction obtained. Now what are seven or eight samples in three months in an entire county such as ours? The enforcement of the Act is nothing more than a farce, for greater vigilance would be necessary for efficiency in any one of our small towns."

We are glad to note country newspapers are taking an interest in this question. It is a hopeful sign.

GROCERS SHOULD NOTE THIS.

The Pharmaceutical Society's crusade against the sale by unqualified persons of patent medicines that contain even the minutest quantities of poison has received a severe check. On Tuesday, before Justices Wright and Charles, the appeal of the Pharmaceutical Society v. Dolve, came on for hearing.

This was an appeal from the decision of the County Court of Lancashire, holden at Manchester. Mr. Finlay, Q.C., and Mr. Grey appeared for the Pharmaceutical Society, who were the appellants, and Mr. Bonsor appeared for the respondent.—Mr. Finlay, on behalf of the appellants, said the point raised was one of considerable importance under the Pharmacy Act of 1868 with regard to the sale of poisons. The respondent kept a drug store, and not being a qualified chemist, he was charged with selling a preparation which he called "Licoricine," and labelled as a wonderfully efficacious household remedy for coughs, etc. One of the ingredients was morphine, and the case made for the Defendant, on which judgment was given for the defendant, was that there was no evidence as to the quantity of morphine contained in it. That he (Mr. Finlay) submitted was not a ground for giving judgment to the Defendant, because the whole object of the legislation was to prevent the dealing with poisons by unqualified persons. Under these circumstances he contended there should have been judgment for the Plaintiffs. Mr. Justice Charles said the County Court Judge, in his finding, held there was not sufficient of the morphine on which to justify a prosecution, and he was, therefore, unable to differ from the County Court Judge. Mr. Justice Wright was of the same opinion. Leave to appeal was refused on the ground that the materials in the case were insufficient.

We quite concur in this decision, for the following reasons:—

1st. The Pharmaceutical Society's crusade is about as mean and mercenary a one as ever an association embarked upon. Its members, and those inspiring the prosecutions to prevent grocers vending certain patent medicines, know perfectly well that the majority of the preparations in question are quack impostures, sold at prices of 11d. to 1s. 1½d., or more, for concoctions of the value of in many cases not even one half-penny.

2nd. The Pharmaceutical Society knowing these facts, takes no steps to enlighten the public as to the swindle of these quack nostrums, but under the untrue plea of the necessity for protecting the public from the dangers of poisonous patent medicines, tries to corner the whole of the profit made out of the sale of such preparations, for its own members.

3rd. The Pharmaceutical Society knows perfectly well that the quantity of poison in a number of the preparations is almost infinitesimal, and that even those containing the most poison, are just as dangerous when vended by a chemist, as if sold by a grocer.

4th. If the Pharmaceutical Society were really anxious to protect the public, it would attack the nostrum itself, and not seek to seize for its members the sole sale of such preparations. In doing this, it shows it is not public health it cares for, but the monopoly of profits arising from the sale of the quack nostrums.

Our advice to grocers is, that the Pharmaceutical Society having attacked them, the Grocers' Associations, as a body, should consider their own interests as against those of chemists. The chemist has become a dealer in tea, why should not the grocer become, more generally than he is, a dealer in the higher class food preparations, toilet soaps and necessaries, the sale of which are at present, in the main, monopolised by chemists? There are scores of such preparations, largely advertised and in public demand, that would yield grocers a handsome profit instead of the miserable one derived from the sale of "Hudson's," "Sunlight," and other proprietary articles that afford the grocer no real profit for his trouble. We shall, in our next issue, give particulars of some articles of the class we refer to.

A PRIZE NEWSPAPER IGNORAMUS.

This is the manner in which he pours out his wisdom in the leader columns of what we suppose is a responsible journal. In the *Glasgow Evening Citizen*, of October 22rd, this educator of the public says:—

"Recently, in England, a farmer was convicted of selling milk which contained too much water. The law fixes a standard, and if the cow in days of excessive heat, and when it drinks heavily of water, fails to manufacture up to that standard, woe betide its master. Still, the balance of good conceivably is with the new order of things. The case at Leicester is a development. It is one that will, perhaps, cause a stir in manufacturing and shopkeeping circles. A manufacturer was convicted of having applied a false trade description to his goods. They were described as 'natural wool,' whereas investigation by a lynx-eyed Board of Trade official showed that there was a mixture of wool and cotton. This conviction is an important one. It is suggestive of extended activity in the future, and of the ultimate supervision of everything eatable, drinkable, wearable, usable, or inhabitable by a cloud of inspectors, thick as the leaves in Vallombrosa, or as locusts out on the feed, paid by the State, and making life to the community—for everybody has something to sell—a terror and a nightmare."

Surely the place for such an ignoramus is not the editorial chair of a newspaper. It is a mistake to take such a one from the moors his nature demands, and to deprive him of his natural food—thistles.

THE FARMERS' DIRECT SUPPLY ASSOCIATION AGAIN.

In April last, Mr. William Brown, trading as the Farmers' Direct Supply Association, was fined at Southwark £20, and 12s. 6d. costs, for milk adulteration. In June last he came before that magisterial curiosity, Mr. Biron, at Lambeth, who fined him £5 and costs, instead of the full penalty. In the same month at Southwark he again appeared, and the Magistrate fined him £20 and costs. July saw him before Mr. Leete, who fined him £10 and costs, and in every part of the metropolis similar convictions have been recorded against this dealer. On October 25th he again appeared at the Court at West London, before Mr. Curtis-Bennett. There were six summonses in respect to one sample of milk sold on behalf of the Farmers' Direct Supply Association to Inspector Grigg in the Wandsworth-bridge-road. The milk, on being analysed, was found to contain only 23 parts of milk, the remaining 63 parts consisting of added water. Mr. Curtis-Bennett imposed a penalty of £20, with 12s. 6d. costs, in respect to one summons, the others being withdrawn.

We recommend this case to the attention of those interested in amending the Food and Drugs Act; £20 is the utmost penalty the law permits, and this case shows its use as a deterrent? A prosecution for adulteration only occurs once in two or three months, and a week's sale of the adulterated milk will more than recoup the penalty. This instance is eloquence itself as to the need, not only for higher penalties, but for power to commit to prison without the option of a fine, upon a third conviction being proved. Mr. Grigg deserves well of the public and of honest milk-vendors for affording them so striking a lesson as to the folly of the existing adulteration laws.

WHAT IS VINEGAR?

At the Hertford Borough Bench, on the 26th, the hearing (adjourned from September 28th) was resumed of the charge against Mr. Hudson Ewanke Kearley, M.P., and Mr. Gilbert Augustus Tonge, trading as the International Tea Company, of having sold at their Hertford shop to the assistant of Mr. Thos. Johnson, one of the Inspectors for Herts, under the Food and Drugs Act, vinegar alleged to be adulterated with pyroligneous acid. On the first day, as we have already reported, Mr. A. E. Ekins, chemist, St. Alban's Public Analyst for Herts, gave as the result of his analysis of one-third of the vinegar, that it contained 60 per cent of pyroligneous acid. On the other hand, Mr. Frank Soudier, Fellow of the Chemical Society of London, chief assistant to Sir Henry Roscoe, said he had analysed the second portion of the vinegar, and did not find any pyroligneous acid in it, but it was a good, wholesome vinegar. Mr. O. Hehner, Analyst for six local authorities, also gave evidence against Mr. Ekins's analysis, and, in the event, the case was adjourned so that the third portion of the vinegar might be sent to Somerset House for examination.

On Thursday, Mr. Thornycroft, solicitor, again appeared for the prosecution; Mr. Walter Beard (Beard and Son, Basinghall-street), defended; and Mr. Russell Cooke, New Inn, Strand, watched the case on behalf of the wholesale manufacturers, who had sold the vinegar under guarantee.

Mr. Longmore, Justices' Clerk, read the following from the Government Analysts:—

"The sample of vinegar referred to in your communication of the 29th September, and marked 'No. 117,' was received here on the 3rd inst. The bottle was securely sealed, the device being a crown, V.B., 484. We hereby certify that we have analysed the vinegar, and declare the results of our analysis to be as follows:—

Acetic acid 3.78 per cent.
Total dry residue 1.18 per cent.
Mineral matter (ash) 0.334 per cent.
Phosphoric acid—
(P₂O₅)—0.0128 per cent.
Alcohol as proof spirit 1.77 per cent.
Specific gravity 1010.6.

From a consideration of the results of the analysis, including an examination of the constituents of the ash and extractive matter, we are of opinion that the vinegar contains no pyroligneous acid, but that the acetic acid present is derived from the acetification of alcohol produced by fermentation in the manufacture of the vinegar; and we are further of opinion that the sample corresponds to a commercial vinegar made from malt and sugar.

As witness our hands this 11th day of October, 1893, R. Bannister, F.I.C., F.C.S., G. Lewin, F.I.C."

After this the Bench dismissed the case, and granted £6 15s. 6d. costs against the county.

Mr. Beard said the case had cost the defendants £100.

A STORY WITH A MORAL.—A woman bought a new-fangled coffee pot from a pedlar. In the evening she showed it to her husband, a hardware dealer, who told her he kept the same thing in his shop for sale at half the price she paid. "Well," said she, "why don't you advertise? Nobody ever knows what you have for sale."

NOTICE TO SUBSCRIBERS.

Index to Volumes I. and II. is now ready, price 1s. Volumes I. and II., bound in cloth, gold lettered, with index complete, 7s. 6d. each, carriage paid. Postal Orders to be made payable to the Publisher, FOOD AND SANITATION, 189, Strand.

FRAUDS IN THE GINGER TRADE.

Food and Drugs Act Inspectors have hitherto taken very few samples of spices, and the result has been that a trade, unique in its way as an impudent fraud, has grown up in these goods. The harmless, mildly exhilarating ginger beer is, it seems, responsible for this lapse into turpitude of many of the largest spice dealers in London. Ginger is an expensive article, and the makers of the old-fashioned fermented ginger beer noticed that after having extracted, practically, all its strength—and the residuum being a mere mass of cellulose, fibre, and starchy matter—it looked very good ginger, although it wasn't. Taking advantage of the fact that spice adulteration has had for so long a period an unchecked career, some of the most astute manufacturers of fermented ginger beer made their contracts with spice dealers conditional on the dealers buying back the "spent" ginger from them. The practice spread, until at present the ginger trade is honeycombed with this species of rascally fraud. We have before us price lists from firms of supposed high repute, in which *ground* ginger is actually quoted at 20/- to 30/- per cwt. below the price at which *whole* genuine ginger can be bought. As ground ginger costs from 1/- to 2/- per lb. for the grinding alone, the quotations of 20/- to 30/- per cwt. less for ground ginger, can only be accounted for in one way. *The bulk of the ground ginger is spent-refuse from aerated water makers, ground up and palmed off upon grocers and the public as genuine ginger of full strength.* Truly there is no limit to the ingenious methods of the fraudulent trader; but now that attention has been called to him, no doubt our readers will give some attention to what has hitherto been a neglected article under the Food and Drugs Acts. Our contemporary, the *Produce Markets Review*, commenting on the practice, says:—

With the growth of the aerated water trade, and with the revulsion of the public taste in favour of the old-fashioned fermented ginger beer, the quantity of spent ginger left after use in manufactures has very rapidly increased. As is notorious in the grocery trade, this refuse material (which is about as valuable as spent tea leaves, spent tan, or hops, or any other exhausted material) is sold in large quantities to wholesale spice dealers or grinders, who mix it off with pure ginger in grinding. The fraud is of a disgraceful character, but it is, unfortunately, not readily detected; especially as an admixture of spent ginger, as a rule, greatly lightens the colour of a ground sample, and makes the worthless, or partly worthless, substitute look handsomer than the real commodity when ground from a low grade of genuine ginger. Of course, if a badly adulterated sample is tasted the admixture is readily detected, as it is almost devoid of the natural heat, strength, and flavour of ginger.

In a vast number of cases a larger or smaller proportion of spent ginger is mixed in grinding, with the result of adding to the gains of the adulterator, and ground ginger is a commodity which from its nature must be so high in price that the practice is undoubtedly exceedingly profitable. A still more glaring fraud, however, and one which should be readily detected by traders who know their business, is unfortunately common—and that is the practice of quoting so-called ginger at prices 20s. or 30s. per cwt. below those at which ground ginger, made from qualities suitable for grinding, could possibly be sold. The grocers, however, are misled no doubt in many cases by such quotations being made by houses of nominally high standing, who are not ashamed to make such quotations, because they buy their produce ready ground, under a so-called "guarantee" of purity. No such guarantee could, however, hold water when the facts are so notorious; any more than the fervent asseverations of innocence made by a pickpocket would hold good in a court of justice against overwhelming evidence to the contrary. Ginger is a substance in small demand as compared with other articles of staple consumption, but as regards spices it is a leading commodity, and although perhaps the most valuable of condiments dietetically speaking, is regarded more or less as a luxury.

Even if it be but a luxury, that is no reason why a worthless "spent" article should be foisted upon the public as ginger, and it is time some attempts were made to stamp out this fraud.

WHY NOT ENCOURAGE ENGLISH INDUSTRIES?

A few weeks ago we had occasion to comment, and that very bitterly, upon the injury done to English trade by the poor creatures who make politics their god, and live for nothing but place, power, and vanity. As we showed then, English cigar-making for export was growing into an industry of respectable proportions, until some governmental ass discovered a dry-as-dust minute issued in the days when Somerset House Chemists were even more woefully ignorant than they now are—incredible as that may be to those who know the tropical luxuriance of int-twisted folly and incapacity that department has so consistently grown—and at once proceeded to squelch the weakling industry. We have a belief, although we must admit that we have not an atom of justification for it, that it is the duty of English Ministers to encourage English trade, and devote their best intelligence to assist it, and find employment for the thousands of hapless English men and women now pinched with hunger, or at absolute starvation point, in merrie England. Our

Ministers are not such—they are windy imposters, every one drawing salaries for filling the public belly with the east wind; all as devoid of policy as they are of patriotism. To take as typical instances the Rt. Hon. A. J. Mundella, and that noble colossal scion of the plantagenets, Sir W. V. Harcourt. Traders may crawl to these poor creatures, petition, pray, and prostrate themselves, and they get what? Words of the sorriest, humbug of the poorest, that ever afflicted earnest men, earning their living honestly, as distinguished from the political impostor, be he Liberal or Conservative, who sells lies to the public and takes anything from £2,000 to £5,000 per year out of the swindle. Sir W. V. Harcourt treated the cigar manufacturers with contempt, until he discovered that his so-doing might lose him some votes at Derby, and endanger his chance of further fattening himself at the public expense. One day he was unable to interfere with an ignorant Inland Revenue minute: it must wait until Parliament met again—until, in point of fact, the trade had been extinguished, and when the few cigar makers engaged in that industry were ruined, and their employes had been thrust on the streets, to swell the unemployed and starving, the House of Commons would (next session) consider the injustice. Such was Sir Wm. V. Harcourt until he learnt that his bunkum was not to be tamely submitted to by the trade he proposed to allow to be strangled. Threats of meetings of the working men in his constituency, of a probable loss of votes by showing the poor political hack in his real light to his Derby supporters, were more powerful than all the misericordium appeals to his common sense and patriotism, and Sir Wm. V. Harcourt, adopting the tactics of the treed opossum, elected to climb down rather than be shot at. He discovered that he could do what he had solemnly declared he could not do, that he could let the idiotic Inland Revenue minute lie. The moral of this to traders lies in the application of it. England wants less politics and more business. It wants Mundellas, if they sponge on their country to the extent of £2,000 per year for directing the Board of Trade, to do some work for that salary, by enforcing the Merchandise Marks Act. It wants the Rt. Hon. Sir William V. Harcourt to give some attention to the scandalous ignorance shown in the Somerset House Chemical Department, an ignorance that has lost England millions of money, and injured industry after industry, to the benefit of foreigners. It wants customs examination of imported food-stuffs, and a compulsory adulteration act, to give fair play to the honest trader. In a word, it wants capable business men, and not political adventurers. At every step the English manufacturer is confronted with harassing, stupid trade restrictions, or dishonest competition by foreigners. English tobacco, cigar and cigarette manufacturers, for example, are compelled to pay duty on the whole unuseable material in the tobacco leaf; but they receive drawback for a percentage less than they pay for, which is sufficient to cripple that industry in so far as an export trade is concerned. At the present moment our English markets are overrun with American and other cigarettes, many of them grossly adulterated, but from year's end to year's end no action is taken against the makers or vendors of these American cigarettes. This fetish worship does not extend to any English-made cigarettes or tobaccos. Here the department, advised by its ignorant chemists, is ever on the pounce. Why this should be so is incomprehensible to us. America boycotts our manufactures by its McKinley tariffs. It is the least English traders might expect that American cigarettes should receive no special favour from English officialdom. The moral for Englishmen is a plain one—Leave American cigarettes and tobaccos severely alone. Smokers can encourage English industries by buying only English tobaccos and cigarettes, the use of which will give employment to English workpeople.

ANOTHER EFFORT OF SOMERSET HOUSE GENIUS.

The Perfumery Committee of the London Chamber of Commerce met last week under the chairmanship of Mr. Gosnell, to consider the circumstances under which the Exchequer had returned the strength of a certain hair-douche for exportation under drawback as 14.6 o.p., instead of 83 degrees o.p., the actual contents of spirit, the difference in this case being obscured by glycerine. A deputation was appointed to confer with the authorities on the matter. It consists of the Chairman, Messrs. Tyrer, Breidenbach, E. Barret, and others. We believe that the house raising the objection were Messrs. Southall Brothers and Barclay, of Birmingham.

MARGARINE.

The *Scientific American* says:—

"It is a fact that, at the present moment, butterine, or oleomargarine, can be bought on the market, which, while representing in exact chemical constituents the products of the dairy, is, at the same time, much cleaner and purer, and more uniform as to quality. Artificial butters have come to stay. Already they are found on the tables of the wealthier and better classes. It is notorious that manufacturers of these products prefer them to the best butters, whether of dairy or creamery production. Moreover, artificial butters possess one insuperable superiority, in that decomposition, through lactic fermentation, is impossible."

OBJECT LESSONS IN ENGLISH LAW.

During the past week a gang of Indian quacks, who thrust needles and thread through the eyes of some of their deluded dupes, dragged out the eyes of others with hooks, extorted testimonials from the victims of their quackish rascality, and went through a series of abominable practices—the bare thought of which makes one shudder, were before our courts, and an English jury acquitted them. We do not know which is the most worthy of cprobrum—the twelve fools who, by the saving grace of *Magna Charta*, were given the opportunity to allow these ruffianly imposters to go forth, unpunished, out into the world to work their fiendish practices upon more helpless children and weak-minded men and women, or the limbs of the law who drew up the indictment. There is such an offence as cutting and maiming. If ever cutting and maiming was practised in this world, it was done by this gang of quacks. But the wondrous framers of the charges against these quacks, although they might well have known that not one scientist in England could justify this hook-and-eye business, proceed against the so-called oculists upon counts that invite a failure of justice. Altogether, between judge, jury, and lawyers, about as irritating a spectacle of how to make the law an ass as could be placed before thinking men.

West London Police Court, on October 23rd, afforded another scene, rich in illustration of the beauties of English law.

A man complained of the conduct of a barman at a public-house. He said he had a sickly wife, and sent for some of the best stout for her. When the stout was brought in he found it filthy, and his wife could not drink it. He sent the stout back, and it was changed, but he found it no better. The applicant wished to show the Magistrate a sample of the stout he had in court, but he was told it was unnecessary until it had been analysed.—The applicant: Then you have no remedy practically?—Mr. Curtis-Bennett: I don't say so, get it analysed.—The applicant then complained of the barman ejecting him from the house by throwing him out.—In answer to the Magistrate, the applicant said the barman used sufficient force to remove him.—Mr. Curtis-Bennett said that was not ejecting him. If the applicant was served with a bad article he must sue in the County Court, but if adulterated, the remedy was in the Police-court. The applicant stepped down evidently dissatisfied with the explanation.

We do not wonder at the applicant being dissatisfied. After paying good money for bad stout, losing the amount expended, and being in addition ejected, he is told he has his remedy. *He must get it analysed.* It could not, of course, be expected that Mr. Curtis-Bennett, being a London Police Magistrate, would know that, thanks to Somerset House chemists and the Inland Revenue Authorities, stout may be anything, and that, unless it contained poisonous ingredients, no analyst could condemn it as adulterated, no matter how vile the quality may have been. Mr. mediocrity-with-a-double-barrelled-name Bennett, deliberately displayed the ignorance of advising the applicant to get it analysed. Now supposing the aggrieved person had been as foolish as the Magistrate and had taken his advice. Over a purchase of perhaps three pennyworth of stout, he would have had to expend first, 10s. 6d. for an analysis of the stout, only to discover when the analysis was completed, that stout may be anything, even to the extent of being a concoction of road-sweepings, and that the law provides him with no remedy whatever against the publican.

IMPORTANT TO BAKERS & YEAST DEALERS.

A few weeks ago we warned yeast dealers, grocers and bakers against the dangers they incur by vending adulterated yeast. The following case shows the necessity for the counsel we gave. In this instance the penalty was a light one. It is scarcely likely to be so in other cases, now that retailers have been cautioned against impure yeast.

At Spilsby, on Oct 23rd, Betsy Neal, of Skegness, confectioner, was summoned for selling adulterated yeast at Skegness on the 26th ult.—Superintendent Bowden proved purchase and analysis of the yeast, the latter showing 50 per cent. of potato starch.—Defendant admitted the charge, stating that she sold it in the same state as it was supplied to her from Hull.—Fined £1 and £1 8s. 3d. costs.

If dealers order yeast from the firms advertised in this journal they need fear no prosecutions.

BREWERY EXHIBITION.—The "Sanitas" Company, Limited, exhibited not merely a collection of their well-known disinfectants and sanitary appliances, but several novelties, including Kingzett's Sulphur Fumigating Candles, which they recommend for the destruction of micro-organic life and insect pests. Another article exhibited by the "Sanitas" Company was Kingzett's Patent Peroxide of Hydrogen, which is recommended as an antiseptic for the preservation of beer in the house, as well as for bleaching and oxidising purposes. Unlike other kinds of peroxide of hydrogen, it is preserved by a patented process from any material loss of strength when kept. The other exhibits of the "Sanitas" Company included their newly-introduced Shilling Pocket Inhaler and some Soluble Disinfectant Tablets, from which a disinfectant solution of any strength may be readily prepared by dissolving one or more tablets in water.

KILVERT'S LARD.

At the Court of Queen's Bench, on the 27th ult., before Mr. Justice Charles and Mr. Justice Wright, the case of *Laidlaw v. Wilson* was heard. This case, an appeal from a decision of Magistrates, raised a question of some importance under the Adulteration Acts, how far the fact of a warranty of purity given to the seller of the commodity excuses him when prosecuted by the purchaser for adulteration. The purchaser, the prosecutor, complained that he had gone into the shop of the defendant and asked for half a pound of lard, and that the lard delivered to him was found to be adulterated with 7 per cent. of beef fat. The defence, was, under section 25 of the Act of 1875, that the defendant, the seller, had purchased it from his vendor with a written warranty that the article was pure, and the question was whether the defence was sustained. Section 25, says, that "if the defendant shall prove to the satisfaction of the justices that he had purchased the article as the same in substance, nature, and quality as that demanded, and with a written warranty to that effect, and that he had no reason to believe otherwise, it shall be a defence to the charge of adulteration. In the present case the defendant, the seller, produced, the invoice he had received with the lard when he purchased it, and which at the top had a sort of scroll containing the words "Kilvert's pure lard." The Magistrates were of opinion that the invoice was a contract note which constituted a warranty within the meaning of the proviso, and so they dismissed the complaint. The complainant appealed.

Mr. Robson, Q.C. (with Mr. Simey), appeared on his behalf and argued the case for him. This, he said, was not a warranty of the purity of the commodity. It was a mere description, and not an absolute description of it as pure lard, but only as "Kilvert's pure lard," and that might by no means be absolutely pure and genuine; it might only be a qualified description of a certain degree of purity deemed sufficient by the manufacturers. Moreover, there was no "warranty in writing"—that is, an express warranty of purity in writing ("Rooke v. Hopley," 3 Exch. Div.; "Harris v. May," 12 Q.B. Div.). [Mr. Justice Charles: That latter case is certainly difficult to distinguish from the present; but may it not have turned upon an absence of warranty with the particular article?] It did not turn on that, but on the absence of a warranty in writing. [Mr. Justice Charles: You contend that though there is a warranty it is not sufficient unless it is in writing?] Just so. According to the view of the magistrates, any mere laudatory title or description of an article on an invoice constitutes a warranty, which precludes a complaint of adulteration or impurity.

Mr. Lawson Walton, Q.C., appeared for the defendant in support of the decision, and cited the case of "The Farmers' Company v. Stevenson," in the "Justice of the Peace" for 1890, p. 708, in which, on a charge of selling adulterated milk, the defence was set up of "warranty of purity," and it appeared that the seller's contract was for the "best milk," and that each churn had upon it a label, "genuine new milk." It was held that this was a sufficient warranty to support the defence. The case, he said, was decisive.

Mr. Robson, in reply, produced an office copy of the special case, in which it was stated that the labels were "warranted genuine milk." So the case cited, he said, was no authority against him, and was consistent with the cases he had cited.

The Court, however, came to the conclusion that the decision of the Magistrates in the present case was right.

Mr. Justice Charles, in giving judgment, said the defence raised was under Section 25, and the contract under which the lard had been purchased by the defendant was for "pure lard," it being warranted as "Kilvert's pure lard." It was not said in terms, "We hereby warrant it as pure lard," but the words used imported a warranty and were in writing. In one of the cases cited, the first, the warranty was only of "lard," and so was quite different from the present. No doubt the case of "Harris v. May" was more to the purpose. But there, the contract being for the supply of new and pure milk, the Court thought there was no warranty of the milk supplied on the particular day. There was no statement in writing that the particular milk supplied on the day in question was pure. In the present case the words used did amount to a warranty of the purity of the whole quantity of lard supplied, and that it sustained the defence. The enactment did not require the use of the word "warranted."

Mr. Justice Wright concurred, and thought that the words "pure lard" imported a warranty. The words were, it was true, "Kilvert's pure lard," but he did not think that made any material difference, the words importing that Kilvert's lard was pure.

Appeal dismissed, and the decision of the Magistrates upheld.

THE EXCESS WATER SWINDLE.

At Abbeyfeale Petty Sessions another step was taken in the farce now being played in Ireland. Sergeant Rowley prosecuted Michael Morrissey for selling butter containing 23·4 per cent. water. The Magistrates on the Bench showed their sympathy with fraud by a fine of 15s. and costs, and yet the Magistrates and landowners who impose these fraud-encouraging fines expect English buyers to be gullible enough to believe Ireland in earnest in suppressing the water as butter swindle, and wonder that English working men and women prefer honestly made healthy margarine to swindling excess watered Irish butter.

At Belfast, on October 24th, Mr. David McMaster, Food and Drugs Act Inspector, summoned William Reilly, 98, Great Patrick-street, for having margarine exposed for sale without a label. Mr. Reilly was fined 20s. and costs.

VINEGAR—WHAT IS IT? MALT—WHAT IS IT? AND WHAT IS MALT VINEGAR?

BY AN EXPERT.

To the manufacturers and sellers of vinegar, these are very important questions, and require a generally understood accepted meaning, if an old and important trade of the country is not to be harassed out of existence, for although the enquiry has been sensibly and practically answered, yet, nevertheless, among County Analysts themselves, there seems to be no unanimous recognition of meaning, some among them insisting that unless the article is made strictly upon *their* conception of its preparation, it is not vinegar; and while quoting the definition as given in the British Pharmacopoeia when it suits their purpose, in other cases they deny it altogether; I myself going with them wholly in the latter case.

As clearly explained in more than one article in trade and scientific journals, vinegar should be a result of vinous fermentation. It would benefit the manufacturers of vinegar, and dealers in the various suitable materials for its production, if it were generally recognized that all vinegars resulting from such alcoholic fermentation, and subsequent oxidation of its alcohol, are undoubtedly vinegar.

At the commencement of the crusade against the sale of dilute wood acid as vinegar, all honest makers of the genuine article extended their sympathies, and were ready and willing to assist the crusaders, but the officials having played havoc among "fakers," and acquired the appetite for blood in the shape of convictions, were loathe to sheath the sword, and sought fresh fields for the display of their prowess, and to obtain renown by hindering genuine manufacture; and the underlings, understanding the position, seek small, but unwary retailers, and entering their shops, ask for vinegar, and insist on *malt* vinegar, they being the only people who do so, the general public being satisfied if they obtain a pure brewed vinegar regardless of origin. The evidence in some cases has been conflicting as to there having been a decided request for "malt" vinegar, but the experienced purchaser is careful to have a satellite with him, who knows his duties, and two witnesses are too overpowering for one on the contra side.

Now, sir, with your permission I will, as briefly as I am able, speak of some of the practical details which, in my opinion, have an important bearing on the subject, prefacing this by quoting definitions of various authorities. Ogilvie, in the latest edition of his Imperial Dictionary says . . . "Vinegar may be obtained from strong beer, by the vinous fermentation of various fruits, or of a solution of sugar mixed with yeast, in short, all liquids which are capable of the vinous fermentation may be made to produce vinegar. All vinegars yield by distillation a purer and somewhat weaker vinegar."

Malt can be obtained from all cereals, those most commonly used being barley, bere or bigg, oats, rye, maize and rice. I do not think it is seriously disputed that the grains named by me can be malted, so I will not adduce voluminous evidence in proof, but will append abbreviated extracts from reliable sources, showing the percentage of the more important constituents, placing one under the other for convenience of comparison.

	Nitrogenous Substances.	Ash.	Phosphoric Acid. p2 05 p. 5.
Barley	12.01—15.73	2.62—3.04	0.95—1.13
Fehling and Faist			
Maize	8.7—8.9	1.6—1.8	0.91
Polson			
Rice	7.2	0.9	0.6
Polson			

The ash of the grains above named contains—

	Phosphoric Acid.	Authorities.
Barley	28.7	Way and Ogston.
Maize	44.5	Stenhouse and Campbell.
Rice	60.2	Zeddler.

Alcohol yielded from the following varieties per 100 kilos—

Wheat	32 litres pure alcohol.
Rye	28 " "
Barley	25 " "
Oats	22 " "
Maize	25 " "
Rice	35 " "

Spons' Encyclopædia.

GUARANTEED ABSOLUTELY PURE.

Warranted to stand any Analytical test. A natural product ensuring perfect digestion not possible in the various manufactured Acetic compounds.

SICILIAN WINE VINEGAR.

Can be supplied in bulk.

Write for Samples and Price to Sole Proprietors:—

72, Mark Lane, London, E.C.

READ & DIGHT.

I do not think it is necessary for me to remind your readers that the amount of alcohol yielded by these matters is in proportion to the percentage of the starch constituent present, and which is capable of being brought into the condition of starch sugar (dextrose), but will refer to the fact later on. The intelligent modern producer of a perishable article of consumption desires principally, to obtain two results in his manufacture, viz.,—

1st. To put on the market an article as free from the elements of decomposition as experience and the application of scientific knowledge will enable him, though to achieve this may probably entail an additional expense; but it is a wise and politic outlay, as he avoids complaints from his buyers, and permanently increases the demand and consequent output.

2ndly. To obtain the above results as economically as securing the desired end will permit.

I opine that no analyst will deny the presence of phosphatic and nitrogenous matters is an unimportant factor in the decomposition of vinegar, and this is a fact *that must not be lost sight of*, seeing that it is here where the manufacturer and the analyst join issue, for while the producer aims at making his finished article as pure as he knows how, and for this purpose strives to decrease the quantity of nitrogenous and phosphatic matter contained in the material, he deprives, in a great measure, the Analyst of his means of determination of origin. I believe that the County Analysts are honourable, and, as a rule, able men, but their technical knowledge, and especially their practical experience, are necessarily limited, and in their anxiety to be correct in their examinations they are apt to ignore the purpose of the "Food and Drugs Act," which is for the protection of the public and prevention of fraud. Far be it from me to imply any unworthy motive to them, but I do say that possibly their pride of profession has the effect of inducing the unyielding attitude they in a great many instances assume, and a tendency to strain the aim of the Act of Parliament.

As I have already stated, the public do not ask for "malt" vinegar, though they require a pure brewed vinegar, and if the buyer gets this in return for his money, where is the fraud? Even the official who invites the shopman to sell him a *pure* vinegar, as vinegar originating from a particular source, though demanded by no one but himself, cannot be said to be defrauded, for he too often buys solely for the purpose of conviction, by insisting for a special name to be given to the article he demands: he, in this instance, does not represent the public, for the public do not enquire for, or desire that nomenclature. I hope you will pardon this digression.

To resume: the manufacturer if he succeeds in eliminating the nitrogenous or phosphatic matters, places himself, as expressed by a well-known and able Public Analyst, in a dangerous position, for he excites the suspicion of the Official Analyst, and possibly, his antagonism. Now this is a pity, for both the manufacturer and the expert desire, or should do so, the same end, i.e., to discourage the offering for sale, and consumption of a fictitious article. How can we reconcile and avoid this divergence referred to? Is the maker to allow the impurities to remain in his manufacture in order that the Analyst may not lack a clue to origin, or shall the Analyst tone down his attitude? If a maker is prepared to affirm on oath in the witness box that his product is a pure one, derived solely from grain, and this to be recognised as "malt" vinegar, or from cane sugar, this to be admitted in its turn to be "vinegar," should not this, lacking reliable tests, be held sufficient? It must be remembered that up to the present, the analytical examination of vinegar has simply been a scratching on the surface, and that, as in the case of distilled malt vinegar, there is not a *positively* reliable test to determine origin. In a case recently heard before a magistrate, the expressed statements of the maker of the vinegar and that of the Analyst were directly at variance, the Analyst positively insisting on the impossibility of removing the phosphates in a practically commercial manner, yet, while not denying that the vinegar was derived from grain, and knowing that all grain contains phosphates, he did not attempt to account for their absence. I should like to have heard him

POWELL'S BALSAM OF ANISEED—FOR COUGHS.

Powell's Balsam of Aniseed—Coughs and Asthma.
 Powell's Balsam of Aniseed—Coughs and Bronchitis.
 Powell's Balsam of Aniseed—Coughs and Hoarseness.
 Powell's Balsam of Aniseed—Coughs and Lung Troubles.
 Powell's Balsam of Aniseed—Coughs.—Safe and Reliable.
 Powell's Balsam of Aniseed—Coughs.—Established 1824.
 Powell's Balsam of Aniseed—Coughs.—Refuse Imitations.
 Powell's Balsam of Aniseed—Coughs.—Sold by Chemists.
 Powell's Balsam of Aniseed—Coughs, Night Cough, Influenza.
 Powell's Balsam of Aniseed—Coughs Relieved Instantly.
 Powell's Balsam of Aniseed—Coughs.—The Oldest Remedy.
 Powell's Balsam of Aniseed—Coughs.—Trade Mark.
 Powell's Balsam of Aniseed—Lion, Net, and Mouse.
 Powell's Balsam of Aniseed—1s. 1½d., 2s. 3d.

try to reconcile his statement of the commercial impossibility of removing them with the fact of their absence. Mention was made in this case of the presence of calcium sulphate, I wonder whether he (the Analyst) has ever determined the presence of calcium compounds in any well known pale ale or bitter beer, such as sent out by the largest Burton brewers, and whether he knows that calcium sulphite is very largely and advisedly used by both beer and vinegar brewers, and that many of the wooden utensils are periodically painted with it. Perhaps some Public Analyst will examine into the truth of this fact.

In another case recently heard, a vinegar maker was charged with *adulterating* his manufacture with water, and a conviction followed. Is not this very heavily handicapping the producer? Vinegars are sold in about five or six qualities designated numerically or otherwise by denominational trade specifications, and proportionately varying in price, the difference between one denominational quality, and another being in the percentage of the acid of vinegar. Now, by what other method than aqueous dilution can these differences be obtained? In any case I thought that Analysts as a body had agreed that any vinegar containing more than 3 per cent. of real acid should not be considered an adulterated article. Of course, this implies that a lower quality should not be sold as a higher one.

I will not intrude upon your space unnecessarily, but to an important, and not too remunerative industry, this is a question of moment, whether the craft as an English manufacture should be surrendered into the hands of the unrestricted foreign exporter, or whether trade should be without hindrance. If not restrained by the feeling that I have already written too much for the space you can afford in your present issue, I should have liked to say more, and I shall be pleased to be allowed an opportunity for going further into the questions as to what malt is, and what malt vinegar is, if the matter would be of interest to your readers and the trade. Before concluding, I would ask all Public Analysts to look into the advertisement pages of any or all of the brewing trade journals, where maize and rice-malt is largely offered for sale.

(To be continued.)

THE LEEDS PUBLIC ANALYST AND "LLOYD'S 8 PER CENT. WATER COWS."

Mr. Thos. Fairley, F.R.S.E., F.I.C., Public Analyst for Leeds, says in a report just issued:—

"The analysis and composition of milk has lately attracted some attention. Speaking from my own experience, a hot, dry season does not tend to impoverish the milk. So long as the cows remain healthy, it is absurd to say that a short supply of water to the animals can increase the proportion of water in the milk.

Cows that are starved, or badly or improperly fed, or that are unwell may give poor milk not at all desirable as an article of food. In my opinion there is no foundation for the statement that many persons have been fined unjustly during the past season for watering milk. The case taken before Mr. Plowden, a London magistrate, only shows what errors may be committed by accepting and deciding on insufficient evidence.

"The standard by which milks are judged is itself a minimum one, much below the average of the thousands of samples analysed every year in this and other countries. Average milk, and still more rich milk, is, and has been, watered down to this minimum, and the public suffer while the dishonest dealer escapes punishment.

"There are many dealers and farmers who are strictly honest, and use all due care in the keeping and feeding of their cows, so that they supply milk of good quality at or above the average. At present these suffer from the unfair competition of those who water their milk. Again, the dealer who supplies rich milk above the average is fully entitled to charge *pro rata* a higher price, but charging that higher price he should be held liable to fine if he supplies milk of lower quality.

"To secure justice to the dealer as well as the consumer, all watering of milk rich or poor should be prohibited; a standard of average milk should be prescribed as in some of the States of America, and whenever milk below the average is supplied farmer and dealer should be required to give the fullest information regarding the origin of the milk, and the condition and feeding of the animals supplying it.

"It is quite practicable to detect even 1 per cent. of water added to milk if samples of milk taken under proper inspection from the same cows be supplied for comparison. The water added to milk is frequently very impure water, and many cases of disease have been traced to this source."

It is several weeks since we challenged Mr. Lloyd and all concerned with the alleged 8 per cent. of water naturally present in milk as it came from the herd of cows to make the analysis public. We further called attention to the fact that not one independent person witnessed the alleged experiments. The analysis has not been forthcoming. As the persons concerned will not make public the analysis, there is one course that Mr. Plowden owes to the country. His decision has caused miscarriages of justice to occur throughout the entire United Kingdom. It is being made the basis of an agitation to lower the milk standard to one still further favouring roguery on the part of milk vendors. It cannot be expected that every magistrate in the country can know the facts of this alleged 8 per cent. water in the milk of a herd of cows. Nearly every newspaper (save this journal) swallowed the allegation as gospel

truth, and yards of twaddle were written about it. Since those responsible for the allegation shirk the proof of their statements, Mr. Plowden himself should be no party to any further bolstering up of it, but should demand that the alleged analytical figures be made public, and failing that, take steps to vindicate the dignity of his court.

MORE BOARD OF AGRICULTURAL FOLLY.

Our contemporary, *The Meat Trades Journal*, has a dexterous manner of hitting the bull's-eye. Referring to the appointment of some twenty-four nobodies, twenty-three of whom rejoiced in the possession of double or treble-barrelled names, to the positions of temporary District Inspectors under the Contagious Diseases (Animals) Act, 1893. *The Meat Trades Journal* says:—

"Of the four and twenty gentlemen here named, one is an ex-captain in the Royal Navy, and another is an ex-captain of the Royal Artillery. The Board of Agriculture is a public department run on scientific lines (?) with professional veterinarians attached to it in various capacities, whose duties occasionally lead to the suspension of the entire cattle traffic of a county, or as happened lately, of a whole country. In the appointment of District Inspectors and even "temporary Assistant-Inspectors" some knowledge of bovine and ovine diseases would be useful, but not a single one of the whole two dozen appear to have a diploma or degree of any kind that would indicate the most elementary or superficial acquaintance with the veterinary profession."

Our contemporary is apparently becoming alive to the fact, that the one qualification for a Government appointment is absolute ignorance of any of the duties appertaining to such an appointment. Liberal or Conservative, Whig or Tory, it is all the same; the jackals of this political humbug or that humbug must be provided for to the injury of English trade, and the harassing of those who are taxed to keep going our governing departments that do not govern. But what earthly deference can be paid by thinking agriculturists to the opinions of these latest twenty-four "Government jobs?"

OLEOMARGARINE LAWS OF AMERICA.

(Continued from previous issue.)

New Mexico. Section 4 of a food act of February 28th, 1889, makes it a misdemeanor to sell any article of food which is not of the substance, nature and quality of the article demanded by the purchaser.

New York. The law of this State, as amended June 4th, 1886, is prohibitive.

North Dakota. Under the law of this State anyone selling or offering for sale adulterated butter or oleomargarine without labeling, branding or marking the substances "Adulterated Butter" or "Oleomargarine," or in case of retail sales without delivering to the purchaser a label or wrapper bearing these words in printed letters, shall forfeit 100 dols. for the first offence, and for every subsequent violation 200 dols.

Ohio. An act passed March 7th, 1890, to take effect May 1st following, prohibits the manufacture or sale of oleomargarine if the substance is made in the semblance of butter. Section 2 of the act reads: "It is further provided that nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine in separate and distinct form, and in such manner as will advise the consumer of its real character, free from any colouring matter or other ingredients causing it to look like or appear to be butter."

Oregon. Under an act approved February 25th, 1890, oleomargarine and other butter substitutes cannot be sold, unless they are so marked as to plainly establish their true character and distinguish them from genuine dairy products. In public dining and eating rooms, where such substances are served, guests shall be informed of the fact by notice printed upon the bill of fare, or conspicuously posted in the room.

Pennsylvania. An act of May 21st, 1885, provides against the manufacture or sale of oleomargarine. It has been vigorously resisted by manufacturers and dealers. On May 3rd, 1887, it was declared constitutional by the Supreme Court. Nevertheless there are several manufacturers in Philadelphia, and a large number of dealers in Pittsburg.

Rhode Island. Chapter 126, Public Statutes of Rhode Island, 1882, requires that every tub, firkin, box, etc., containing any substance in semblance of butter, and which is not made exclusively from milk or cream, shall bear the word "Oleomargarine." Retailers of the substance must deliver to the purchaser a written or printed card bearing the word "Oleomargarine."

South Carolina. An act approved December 22nd, 1885, makes it a misdemeanour to fraudulently adulterate, for the purpose of sale, any article of food.

Vermont. By an act approved and in effect November 13th, 1890, it is prohibited to sell, expose for sale, or have in possession with intent to sell, any article of compound "made in imitation of butter, and not wholly made from the milk or cream, and that is of any other colour than pink."

POWNCBEY'S
PURE WINES, OLD BRANDIES
 And THOROUGHLY MATURED WHISKIES,
 Are specially adapted for Medicinal and Family Purposes.
 QUOTATIONS ON APPLICATION.
POWNCBEY & CO., 183, Oxford St., London, W.
 Free Delivery. No Agents. Terms Cash.

THE FEWER OF HIS KIDNEY THE BETTER.

Every grocer who wishes well to an honourable calling will be pleased that Mr. James Brown, grocer, Brighthouse, has been fined £5 and costs and not a few will be sorry the penalty was not a heavier one.

At the Halifax West Riding Court, on the 28th ult., Mr. John Seed, unsepector of Weights and Measures, stated that he went to the defendant's shop and found that a large scale was being used for weighing 7lb. bags of flour for stock. The scale was 2ozs., against the purchaser. On the other side of the scale where the bags were placed was an empty bag which weighed 1½oz. One of the assistants stated that Mr. Brown had told them to use the empty bag when flour was dear. Defendant was further charged under another section of the Act with having used the scale with an intention to defraud. A penalty £5 and costs, altogether £6 7s. 6d. was imposed in the first case, and in the other case he was ordered to pay the costs, 5s.

MORE VINEGAR TO SOMERSET HOUSE.

At Enniskillen, Sergeant Sheridan prosecuted several persons for vending alleged adulterated vinegar. Objection was taken to Sir Charles A. Cameron's certificate, and the samples were eventually referred to Somerset House.

CORRESPONDENCE.

THE BACTERIOLOGICAL EXAMINATION OF WATER.

DEAR SIR,—Just a word or two in support of Mr. Cassall's excellent communication in *re* the bacteriological examination of water.

On my own part I have held for many years, and have argued the point privately with some of our most eminent bacteriologists, and have stated publicly and frequently that in all probability, pathogenic germs are to a great extent artificially manufactured, that filth causes disease, and disease cultivates germs, and then, but not until that stage is reached, germs directly and distinctly cause disease. Dirty habits, can I believe, arm an innocent bacterium with a deadly power. Just as specifically poisonous germs may be gradually robbed of their dangerous properties by artificial cultivation in wholesome media, so may the opposite be done, when the medium of growth is unwholesome.

We possibly go wrong in pursuing the faith laid down by Tyndall and others, namely, that the principle of the acorn from the oak, and the oak from the acorn must be rigidly applied to the manner in which disease germs are produced and re-produced.

Thirty years ago I was an ardent student of parasitic microscopic fungi, and I then felt satisfied that the morphicology of the mildews, moulds, bunts, and cluster cups, is to a considerable extent dependable upon the matrix upon which they are compelled by circumstances to grow; and not entirely that each one is the specific parasite of the particular plant upon which it is found.

To believe that the comma bacillus is the primary cause of cholera, is to pin one's faith to the belief that little organisms was specially created for the purpose of imparting that special form of disease, and that it has no other part to play in the economy of nature, and, further, that given the destruction of the last bacillus, we have the end of the dread disease; to this doctrine, for one, I cannot subscribe.

Diseases, are probably, as a rule, manufactured on the spot, and although importation is a great danger, insular filth is a greater, and so-called Asiatic cholera can probably be manufactured in the East-end of London, as well as of Europe.

The mere counting of colonies, and noting whether or not they mostly liquify gelatine, is to my mind quite an insufficient ground upon which alone to diagnose the quality of a drinking water. I once impregnated two gelatine tubes by the puncture process, No. I. with "hogwash," and No. II. with deep chalk well water; the growth in No. I. was a wholesome-looking white mycelium, and did not cause liquification, whereas, No. II. rapidly and markedly liquified. On this evidence, if taken alone, the filthy stuff from the hog tub was fit for dietetical and domestic purposes, whilst the chalk water was not.

When bacteriologists report upon a sample of drinking water they should give its chemical as well as its biological character, thus allowing the former to take a place amongst the results, upon the combined evidence of the whole of which, and upon no one without the rest, can an opinion be safely given.

If it be true that pathogenic germs will not live long in well oxygenated pure waters, then to prove to satisfaction, by chemical and microscopical means, that the sample is pure is all that is needed. If, on the other hand, the water is chemically and microscopically impure, even if it be free from disease germs, it may at any time become impregnated with them, and, as I have suggested, be even the seat of the manufacture.

To teach the people that disease comes from the outside is a very dangerous practice, it causes them to close their windows when they should be open, and to heat up their rooms into cultivating chambers when they should be frequently exposed to the fresh and frosty air. Let bacteriologists report, side by side, with their germ counting, the results of a complete analysis of the sample. Water analysts may well turn their attention to the bacteriological examination of the sample, perhaps; but certainly the bacteriologist cannot afford to ignore the results to be obtained by an all-round analysis.—Yours truly,

Southampton.

ARTHUR ANGELL.

IMPORTANT TO GROCERS & BAKERS.

If you wish to AVOID loss of money, repute and trade, caused by PROSECUTIONS for ADULTERATION, SELL ONLY YEAST manufactured by the following Firms:

C. A. BEUKERS.
W. A. BEUKERS.
P. BOEZEMEIJER & CO.
A. DAALMEIJER.
J. H. VAN GENT.
HAMER & CO.
HOEK & CO.
J. HOUTMAN.
JANSEN & CO.

H. C. JANSEN.
JANSEN & TAK.
VAN KAN & CO.
M. KRANEN.
P. J. LAGERWEIJ.
P. J. MEIJER.
THs. Cs. MELCHERS.
NIEDFELD & CO.
P. SCHILTMAN.

J. J. TONINO.
J. VAN DER VALK & CO.
JAN VRIJLAND.
VRIJLAND VAN DEN HOOGEN & CO.
WALRAVEN BEUKERS & CO.
B. A. J. WITKAMP.
J. WITKAMP & CO.
P. J. WOUTERLOOD.

The above Firms are Members of the

YEAST UNION, SCHIEDAM,

And guarantee their Yeast absolutely pure and free from any adulteration whatever.

Every Package bears




their Trade Mark.

Every shipment to England is Analysed, and any Member of the Yeast Union, Schiedam, guilty of adulterating Yeast would be fined heavy penalties.

NOTE : Yeast Union (Schiedam) Yeast is guaranteed free from Adulteration. Resist all inducements to deal in any other Yeast.

WHEAT PHOSPHATES Nourish Brain and Frame, Form Bone, Teeth and Muscle, and Enrich the Blood.



Is the only Food which contains the

WHEAT PHOSPHATES extracted from Wheat Bran, and is therefore the most **NOURISHING** food in the WORLD.

For **INFANTS**: Developing Bones, Muscles, Teeth, Brain;
For **INVALIDS**: Restorative and Invigorating; retained by the weakest stomach when all other food is refused.
For **ADULTS**: A Delicious Breakfast and Snapper Dish; Vitalises the brain and all the functions of the body.

½ lb. Sample in **HANDSOME ENAMELLED Box** sent free on receipt of 8d. to cover postage (mention this Paper)

Sold by Grocers, Chemists, &c., in tins, 1 lb. at 1s., 4 lbs. at 3s. 9d., or sent carriage paid by

FRAME FOOD CO., LTD., LOMBARD ROAD, BATTERSEA, LONDON, S.W.

Chafed Skin, Piles, Scalds, Chilblains, Chapped Hands, Neuralgic, and Rheumatic Pains, Sore Eyes, Ear-ache, Cuts, Sunburn, Insect Bites or Stings, Throat Colds, and Skin Affections quickly relieved by use of

CALVERT'S CARBOLIC OINTMENT,

Large Pots, 13d. each, with full Instructions.

Count Circular says: "We cannot too highly recommend Calvert's Ointment. It is the best general Ointment with which we are familiar, and ought to be a stock remedy in every house hold."

Private report from Limassol Cyprus: "I have never found anything to come up to it for neuralgic and Rheumatic Pains."

Samples sent Free by Post on receipt of value.

F. C. CALVERT & CO, MANCHESTER.
Awarded 60 Gold and Silver Medals and Diplomas.

January, 1891, p. 36, insulted the English Medical Profession as he had labelled the Italian faculty. This is how the journalistic quack nostrum agent in advance, who concocted the Eliza Armstrong story, and, under the plea of regard for virtue, saturated with the outpourings of his prurient imagination the neurotic and anæmic who follow him, threw down from his *Fagin's Miscellany* the gage to the medical world: "There remains," said Mr. Stead, "only to await the result of the challenge to Dr. Snow and the cancer specialists. I had not long to wait. Dr. Kennedy, writing in the *National Review* of November, and quoted by me that month, stated that the challenge to investigate the alleged case of cancer cure had been evaded. Dr. Snow was ready to examine into the case when it had been submitted to any medical society, but all medical societies by their rules being forbidden to examine into any case where the cure is said to have been effected by any secret remedy. Dr. Snow's answer was a smart shuffle to avoid an enquiry. The inference is obvious. To shirk an appeal to your own tribunal is to give up your case without even venturing to be heard in opposition to the other side." The result of this "cock-a-doodle-doo" was that a committee of medical experts agreed to test the Mattei nostrums—not secretly, without any divulgence of the names of the medical men, as has been the case with the new nostrum—the alleged "Drunk Cure"—in regard to which the medical men vouching for it, may be for ought the *Daily Chronicle* knows, or the public have a chance of knowing, newly unscrupulous adventurers, struck off the medical register for disgraceful and infamous conduct, but openly as such an enquiry ought to be held. The results of this Committee's investigations were published in the *British Medical Journal*, of August 13th, 1892, and from the report we give the following excerpts:—

Dr. G. W. Potter, the Chairman of the Investigation Committee said, "The Committee consisted of the late Sir Morrell Mackenzie, who was appointed its first Chairman, Mr. Lawson Tait, and myself. . . . On the death of Sir Morrell Mackenzie, it seemed necessary to strengthen the Committee by the addition of other medical men resident in London, or to dissolve it, as Mr. Lawson Tait lived at too great a distance from town to take any personal part in the work. Mr. H. A. Reeves, F.R.C.S.E. and Mr. John Hopkins, F.R.C.S., both consented to join the Committee and to see the investigation carried to a conclusion. . . . It now became obvious to all the parties concerned that the Matteists must either cure their cases or ignominiously give up the contest. But the cases could not be cured by any such means as were employed. On the contrary, the cancerous growths all continued to progress exactly as if no treatment whatever were used. Some developed slowly, others more rapidly; but one which had presented an unbroken surface at the outset very soon became deeply ulcerated and excavated, and even the Matteists themselves were obliged to admit that it "seemed to be getting worse."

After this came shuffles on the part of Mr. Stead's friends to get out of the enquiry, and in the end they positively declined to continue the cases under the observation of the Committee in any way whatever. As Dr. Potter's report gives it:—"The Matteists took to flight and ran, figuratively speaking as, fast and as far as their legs could carry them."

"What are the medical aspects," asks Dr. Potter, "of the Mattei treatment? There are no medical aspects of any kind. Matteism, in the deliberate judgment of the Committee, consists exclusively of vulgar, unadulterated, unredeemed quackery. Mr. Stokes analysed the electricities, the potions of the Matteists, and found them to yield no other reaction than that of plain distilled water. The results of administering these substances to patients entirely coincided with the results of chemical analysis. Water is the potent magician which, when taken in unquestioning faith, makes some of the deluded victims of Matteism feel that they are relieved of their pains. Even the poor creature whose cancerous growth is ulcerated and excavated, and whom the Matteists themselves admit to be "worse" persists in declaring herself improved, and pathetically anticipates the day of her perfect cure. There is nothing more to be said. The story is as old as the world. The savage trusts to his amulet; the civilised man, both in the upper and lower circles, submits himself with childish, if not, childlike simplicity to the pretences by the quack."

But even this shameful swindle—about the very meanest of the mind of man can imagine, for its concocters evidently knew enough of human nature to be certain that just as a drowning person clutches even at a straw, so would a sufferer from that

THE PUREST OF ALL SCOTCH WHISKIES.

D. LENNOX & SONS

LONDON OFFICE:

41, PALL MALL,

S.W.

Bonded and

Bottling Stores

DUMFRIES,

N.B.



LENNOX'S WHISKY

36/-
42/- 48/-
PER DOZEN CASH.

Delivered within London
Carting Circuit, or Carriage
Paid to nearest Railway Station
in Great Britain.

Do not drink Blends of Malt Grain
and Potato Spirit.

Medical Men and Connoisseurs will find this the
perfection of an absolutely pure & wholesome spirit.

FOOD & SANITATION.

W. T. STEAD.—THE MATTEI SWINDLE.— AND THE "DRUNK CURE."—II.

WHY DOES NOT THE PUBLIC PROSECUTOR TAKE ACTION?

In our last article we gave Mr. W. T. Stead's public professions re the alleged Drunk Cure, his attack upon the Italian Medical faculty when he was engaged in booming the Mattei Cancer Cure swindle, and his recommendation to dipsomaniacs to resort to Mr. A. J. L. Gliddon. At the moment of writing this article one electric quack and his associate have been arrested. It is, perhaps, too much to hope that the Public Prosecutor will ever do anything to prosecute anyone, however barefaced the fraud, but the following facts at least show that if he will not, he ought to prosecute those now running the Mattei Swindle. Consistent in his methods, Mr. Stead, in the *Review of Reviews*,

terrible disease, cancer, be sure to try the Mattei nostrums and pay 2s. or 3s. 9d. per bottle for one ounce to three ounces of *distilled water*—was not killed by the above exposure. In a recent interview with one of the vendors of these nostrums, the writer was informed that the demand for white, red, and green electricities and the other quackeries, was not only enormous, but daily increasing—truly a pitiable proof of the pernicious effect of Mr. W. T. Stead's laudation, whether it was done ignorantly and emotionally, or for purposes of gain. Viewed in the light of the facts above given, the following letter is interesting, as showing how deeply Steadism has bitten the public. It is one of many that have poured in upon us from persons who by Mr. Stead's mixture of Pecksniffism and Chadbandism have been reduced to that condition mentally and physically in which they readily fall victims to the quack and the spook merchant.

To the Editor of FOOD AND SANITATION.

SIR,—I have just read the extraordinary article in your issue of November 4th, in which, without adducing any substantive evidence, you denounce the Mattei system of Electro-Homoeopathy as a "swindle," and then treat, in an equally unfair and ungenerous manner, Mr. Stead's recent announcement of a new remedy for dipomania.

Placing the question of the Mattei remedies on one side, I was struck with the fact that your strong denunciation of the cure for drunkenness is put forth solely on your own authority and without any apparent substantiation.

I am quite disinterested in the matter, but when a paper such as yours, however popular it may be, arrogates to itself the right to denounce a new cure, simply because it is new, and is prominently brought before the notice of the public by Mr. W. T. Stead, one is inclined to speak out and speak strongly. You do not criticise the effects of this preparation, nor have you, to judge from the article, investigated it at all; and yet, in a most uncourteous and dishonourable way, you directly give the lie to Mr. Stead (who has investigated it, and experimented upon test cases under the supervision of qualified doctors) and style it "a new humbug."

If you had acted fairly in the matter and made a few enquiries before denouncing it as an "imposture," you would have discovered that Mr. Gliddon is so convinced of its efficacy, and is so anxious to guard against any suspicion of "swindling," that he refuses to accept any money at all for the remedy until the person who takes it has proved its value and been cured by it. This, on the face of it, is sufficient to an unprejudiced mind to show that it is the very reverse of "an imposture" or swindle.

When a new remedy such as this is made public, it is done with one of two objects, either

- (1) With a genuine desire to benefit the community, by bringing to public notice the fact that such a cure has been discovered, or,
- (2) *As in the case of quacks*, to foist upon the public a concoction which is practically valueless—IN ORDER TO EXTORT MONEY.

As I have explained that Mr. Gliddon will not take any payment for this new remedy until it has been proved by the patient to be efficacious, it is impossible to classify him under the second heading and accuse him of quackery.

I can understand and appreciate zeal in exposing the many quack "systems" and "medicines" with which we are unfortunately inundated, but it surely does not require a very great mind to grasp the fact that every new remedy is not necessarily on that account "a quack nostrum."

But so far as I can gather from your article, this is the sole and only reason of the utterly unfounded and uncalled for statements you make, and, taking your article as it stands, I challenge anyone to point out to me a SINGLE PROOF therein which does in any way substantiate your unfair and (in my judgment) malicious tirade against the remedy.—Yours faithfully,

A. PALFREY HOLLINGDALE.

7, Stonestreet, Tollington-park, N., November 7, 1893.

Mr. Hollingdale's letter assumes that we have not investigated the alleged cure for drunkenness, and accuses us of acting unfairly, because "Mr. Gliddon is so convinced of its efficacy and is so anxious to guard against any suspicion of swindling that he refuses to accept any money at all for the remedy until the person who takes it has proved its value." This statement is untrue. Mr. A. J. L. Gliddon asked the writer of this article, within the past week, twenty guineas for the alleged cure, stated that the money must be paid *before* treatment, and refused to supply a bottle of the alleged cure for independent analysis. As to our exposure being malicious, our readers may judge from the following facts:—

Mr. A. J. L. Gliddon is the vendor at 18, Pall Mall East, of the Mattei quack swindles, which are distilled water, sold at 2s. per one and a-half ounces, as the following purchase proves:—

[COPY OF INVOICE.]

All Communications
To be Addressed to the Manager.
Telegraphic Address,
"Matteist, London."

COUNT MATTEI'S REMEDIES,
18, Pall Mall East,

London, S.W., Nov. 8th., 1893.

Dr. to Central Depot for the United Kingdom and Colonies.

Cheques to be made payable to A. J. L. Gliddon.

Tubes of Globules	at	2s.	
" " " " " " " "	"	1s.	1s.
Bottles of Electricities ..	"	2s.	2s.
" " " " " " " "	"	4s. 6d.	
Ointments	"	2s.	
Aqua per la pelle	"	4s. 6d.	
2 M. MS. " " " "	"	2s. 6d.	2d.
1 S. Stone			1s.
			4s. 2d.

Paid. M. S. G.

Mr. Stead in his letter to the *Daily Chronicle*, a week ago, recommended those wishful to try the remedy for drunkenness to apply to Mr. A. J. L. Gliddon, thus showing that at the present time Mr. Stead has a close connection with Mr. A. J. L. Gliddon. Now we wish our readers to particularly note the following, taken from the report of Dr. G. W. Potter, published in the *British Medical Journal*, Aug. 13th, 1892:—"Mr. Stead," says Dr. Potter, "expressed himself as thoroughly ashamed of his champions. He, unfortunately for himself, had been fully convinced that Matteism was an inspiration, and that Mattei and all his followers, but especially his medical followers, were loyal lovers of truth." It may here be noted that Harness alleged the same as to his medical "touts." Further on in the report Mr. Stead said: "he was there to convict them of falsehood, and to denounce them before the whole professional and non-professional worlds." That Mr. Stead was imposing on this committee that they might not expose him, and had no intention whatever of so denouncing his associates is clear, from the fact that it is to the chief of the Mattei gang of swindlers that he now, sixteen months after this *misericordia*, recommends the public to repair, to pay twenty guineas for a new quack nostrum. Truly a pretty fashion in which to denounce and convict of falsehood persons whose dupe Stead protested he was. As to the alleged cure for drunkenness, we must, owing to want of space in this issue, reserve our own and medical men's investigations into it, until next week, but there is one question that we must ask in the public interest, and that is—Of what use is our Public Prosecutor? It was 15 months ago that the report of Dr. Potter was published in the *British Medical Journal*. In Aug., 1892, we also called attention to the Mattei fraud in these columns. Since then, the business of swindling the public by selling water under false pretences as white, red, &c., electricities, has been carried on—and is daily rapidly increasing. Is the Public Prosecutor ever going to prosecute anyone, and do some useful public work for the salary he draws? It is a grave scandal that despite the exposures made by *Hygiene* of this fraud, the after report of the Medical Investigation Committee, and our own exposures, that this imposture should be allowed to exist, duping and plundering those who are foolish enough to believe the lies disseminated from Mr. Stead's friends at 18, Pall Mall East. The Public Prosecutor has distinguished himself by some colossal failures, Hurlbert and Spencer Balfour to wit. It would be a relief to the public if he varied the consistency of his idleness by a little necessary work. The public might then begin to believe that he was alive and in the flesh. At present they have every excuse for doubting his existence, and might well do so but for one fact—he draws his salary regularly.

(To be continued.)

AN INTERESTING LEGAL POINT.

At Pontypool Petty Sessions, on October 28th, Annie Lewis pleaded not guilty to selling cocoa adulterated with starch, at Pontypool, on the 2nd October. Mr. H. M. Waddington prosecuted for the County Council, and Mr. W. C. H. Cross, L.L.B., solicitor, Bristol, defended. Mr. Waddington said the defendant was the wife of the local manager of the Victoria Tea Company. The cocoa was labelled on the inside that it was an admixture, but that was no public protection, as the purchaser would be in ignorance of it until after the purchase was completed. Inspector Lewis said he went to defendant's shop, and asked for ½ lb. cocoa. She gave him two ½ lb. packets, and upon opening them to divide them into three parts for analysis, found the inside packet was marked "An admixture." The analysis showed it contained 30 per cent. of cocoa and 70 per cent. of other matter. In reply to Mr. Cross, witness said he told Mrs. Lewis the sample was to be sent for analysis to the Public Analyst, and that it was sent with fourteen other samples by rail. For the defence, Mr. Cross said he objected to the manner in which the sample had been sent. Under the 16th section of the Food and Drugs Act was laid down that the sample should either be conveyed by messenger or registered post, when the Analyst resided more than two miles away. The prosecution had failed to prove the same had not been interfered with before the Analyst received it, as the Act had not been complied with, the case should be dismissed. After a brief consultation, the Bench dismissed the case, and on application of Mr. Cross, the Bench allowed £1 1s. solicitor's fee.

HOW CO-OPERATORS PAY £40,000 PER YEAR FOR WATER SOLD AS BUTTER.

If there be one man, woman or child in the United Kingdom outside of novices in practical everyday life like Mr. Acland, M.P., Minister for Education, and Mr. Arnold Forster, M.P., author of that distortion of truth on the laws of everyday life, who believes that present day co-operation has a particle of the spirit of Kingsley, Maurice, Holyoake or Neale about it, we recommend that person to read the shameful revelations in the prosecution of the West Riding County Council v. the Skipton Co-operative Society, reported *in extenso* in another column. It is nearly a year ago since we first called the attention of the public to some of the practices of the Co-operative Stores, and since then we have repeatedly had occasion to comment upon the encouragement magistrates give to Co-operative Societies to practice with impunity offences against the Food and Drugs Act. With honest Co-operation we have every sympathy, but with the network of sweating, meanness and deception of the consumer that passes as Co-operation to-day, we think no fair-minded person can do otherwise than agree with us in feeling that whatever be the cost, and however great be the shattering of ideals, Co-operation must be purged of such disgraceful scandals as those dragged to light at Skipton. The facts that came out in the Skipton trial are no new ones. The Wholesale Co-operative Society cannot claim that it is the first time its attention has been called to the vending of butter containing some eight per cent. of excess water, the said excess water being sold to the purchaser as butter and charged at butter price. The admission the Co-operative Society makes to-day it made nearly a year ago through its solicitor, who stated that the Society sold £500,000 worth yearly of this class of so-called butter. Inspector Randerson paid 1s. 2d. per pound for butter at Skipton Co-operative Stores that contained instead of the 16 per cent. outside limit of water, eight per cent. more water than it ought to have contained, viz., 24 per cent. The full significance of this to the purchaser is not apparent by a cursory glance at the figures, but when calculated in money value it reveals the astounding fact that upon every pound of such butter bought by Co-operators there is 1½d. paid for water made to stand upright and sold to them as butter. But a further calculation discloses an even more surprising fact, viz., that, taking the statement of Mr. William Lamb Stokes, J.P., Limerick, butter buyer for the Wholesale Co-operative Society, Manchester, as correct, that the Society buys annually £500,000 of this class of butter, we are confronted with evidence that the hard worked, thrifty and earnest co-operators in the North of England pay for excess water £40,000 in this one item alone, an amount equivalent in round figures to about one shilling and sixpence in the £ upon every £1 expended upon butter. It will be noted that Mr. Stokes alleged that "the whole butter of Ireland averaged 24 per cent. of water." We are in a position to give Mr. Stokes's statement, damaging as it is to the Irish butter trade, an absolute and unqualified denial. Our columns have shown many convictions in Ireland for percentages of water below what Mr. Stokes gives as the percentage. We need not, however, go back to those cases, for the reason that we have before us present-day proof to contradict Mr. Stokes's allegation in trials that took place last week in Ireland. The *Munster Express*, November 1st, says:—

At Kilrush Petty Sessions, before Mr. B. W. C. Reeves, D.L. (Chairman), Mr. John Culligan, and Mr. B. Core, Austin Mescall, Drumellihi, and John Greene, Kilmoredunane, were charged by Sergeant Maurice Kane, Local Inspector, with having offered butter for sale in the local market which was adulterated with 20.48 per cent. in one case, and in the other with 48.92 per cent. of water. Sir Charles Cameron's certificates were produced to prove the charge and were not disputed. Mr. Kelly, solicitor, for the defence, made a strong appeal to the Court not to be so stringent in the interpretation of the law, as to impose fines on farmers in such cases as this. The maximum percentage of water allowed, appeared to be 16 per cent. In the present instances this was not much exceeded, and it was no dishonest attempt on the owner's part, nor was their butter bad, as it had since been absolutely sold in the Limerick market for the top price of the day. He saw in other places where there was only a little excess as in their case, that the cases were dismissed. If the Court did not do this, let them at least, only impose the smallest fine. He saw, where in Limerick, the home of the Butter Merchants' Association, the upright Magistrates there, let greater offenders than his clients off with the fine of 5s., and he asked the Kilrush Bench not to be more vigorous than the justices of the Ancient City. After considerable discussion, the Chairman said they should hold with County Court Judge Kelly, that the Act was violated, but they would only impose the fine he put on, on appeal, that was £1 each and costs. In two other cases similar rulings were made.

At Abbeyfeale Petty Sessions, as reported in the same journal, before the Hon. John French, R.M., Listowel, in the chair; also present—Mr. O'neagh Hartnett and Mr. Dalton, Sergeant Rowley, Inspector under the Food and Drugs Act prosecuted

Michael Morrissey, a farmer of Abane, Co. Kerry, 8 miles from Abbeyfeale, for selling butter on the 2nd instant at Abbeyfeale market, which contained 23.4 per cent. of water, 16 per cent. being allowed by the Act. The Sergeant proved to the buying of 1 lb. from defendant, and then complied with the Act in making three parts of it, giving the owner one and forwarding one to Sir Charles Cameron; he produced his certificate. Mr. Le-hy, solicitor, prosecuted on behalf of the Butter Merchants' Association, and pressed for a heavy fine, it being the first case under the Act in this place. A fine of 15s. and costs was inflicted and a caution, if any other case comes on a larger fine will be put on. Mr. Curtin, solicitor, appeared for defendant.

We have here instances of the Butter Merchants' Association prosecuting for adulteration, and laying down 16 per cent. as the maximum amount of water Irish butter should contain, whilst at the same moment, the treasurer of their Association Mr. Stokes, in Skipton, is trying to convince magistrates that 24 per cent. of water is a proper amount. But, even this does not plumb the real depths of the imposition upon Co-operators. The prosecutions recorded above prove the accuracy of the statements of Mr. A. H. Allen, the Public Analyst; but they prove more, in the fact that at this date, nine months after the *Burnley and Saddleworth prosecutions against Co-operators for excess water*, the Manchester Co-operative Wholesale Society still continues to vend as butter an article containing the excess, 8 per cent., of water. This indicates that, as regards the offence of selling excess water at butter rates, the society is incorrigible, and that it deliberately, with absolute proof before it of the wrong to the consumer, breaks the law. This being so, we cannot help expressing our surprise at the action of the Magistrates. The penalty of 20s. and costs for an offence disclosing the enormous sum of £40,000 per year taken from the thrifty poor of Lancashire and Yorkshire—for it should be remembered that it is mainly operatives earning scant wages who are members of the "Co-ops"—is a shameful miscarriage of justice, to which the attention of the Lord Chancellor ought to be at once directed. It is not an offence for which any excuse can be advanced, as our columns have proved times over within the past few months. For example, on July 21st of the present year, at Ennis, a dealer was fined for selling butter containing 17.72 of water, yet the Manchester Co-operative Society's witnesses, would make believe that Irish butter averaged 24 per cent. of water, in the face of actual fines inflicted in Ireland for 17 per cent. water. Dr. P. Vieth, who has analysed more samples of butter than any living scientist, found English butter, fresh and salt, in 1890 averaged 11.54 per cent. of water, the maximum being 14.39 per cent. Mr. Droop Richmond, Analyst for the Aylesbury Dairy Company, found that throughout last year English salt butters averaged 13.98 per cent. water, and French salt butters 12.86 per cent. water. When it is seen that the butter forming the subject of this prosecution at Skipton contained 24 per cent. of water, the penalty of 20s. for so grave an offence is absurd. The fact that the Wholesale Society has appeared before the Court upon previous occasions for the same kind of offence, makes this glaringly inadequate fine stand out the worse as a ridiculous exhibition of justices' justice. Inspector Randerson has done good public service by prosecuting in this case, and it is a great pity the Magistrates gave the effort such scant sympathy.

MR. CURTIS-BENNETT AND MARGARINE.

On the 26th October, at the West London Police-court, Amos Freer, 43, Melina-road, Shepherd's-bush, W., was summoned by Inspector Oatley, on behalf of the Hammersmith Vestry, for selling margarine as butter, and selling margarine in other than a stamped paper. Inspector Oatley's assistant proved the purchase of a quarter of a pound of 14d. butter in a plain paper, and that no statement was made at the time of purchase. Defendant pleaded guilty to selling margarine in unstamped paper, but not guilty to the other summons, as he said he told the Inspector that it was margarine. The Magistrate, Mr. Curtis-Bennett, on the evidence pointed out to the defendant that that was after the purchase, therefore the offence had already been committed. The Analyst's certificate stated the sample to be margarine, and to contain 60 per cent. of foreign fat. The Magistrate, in convicting, told the defendant that if he wished to sell margarine he must do so as margarine, and not pass it off as butter, especially as his shop was situated in the midst of a very poor neighbourhood. Fined 60s., and 12s. 6d. costs, for selling margarine as butter, and 20s., and 2s. costs, for selling margarine in an unstamped paper.

DEATH OF SIR ANDREW CLARK.

We regret to record the death on November 6th, of Sir Andrew Clark, Bart., M.D., at his residence, 16, Cavendish-square.

The deceased baronet was in his sixty-seventh year, and had risen by sheer ability, without the assistance of powerful friends or patronage to the highest honour his profession could bestow on him—that of President of the Royal College of Physicians. Success did not spoil him. He was, until his fatal seizure, as keen a student as he was an able physician; and in all that concerned the advancement and enlightenment of mankind, he was enthusiasm itself. He has died regretted by all, and the world is truly the poorer by his loss.

HOW MAGISTRATES ENCOURAGE FRAUD.

More scandalous examples of justices' justice than the following have happily not been lately before the Courts. Absolute sympathy with roguery is here shown in one case by a fine of 1s. and costs for an adulteration of gin by excess water to the extent of 27½ per cent., i.e., for a swindle of over 31. in the shilling upon the consumer, these magistrates inflict a fine that the sale of 4s. worth of gin would recoup. The reports shall tell their own tale of how absolutely unfit these justices are to sit upon the Bench that their presence disgraces. The cases were prosecutions brought by the West Riding of Yorkshire County Council.

Christopher Oddy, of the Castle Inn, was charged with selling gin 53 degrees under proof. The Inspector purchased a half-pint of gin at this house, and paid 1s. He told the landlord for what purpose he required it. The Public Analyst had sent the following certificate: "The sample had alcoholic strength of 53 degrees under proof. This corresponds to a mixture of gin of the minimum legal strength (35 degrees under proof) of 72½ parts, excess of water 27½ parts. There was no objectionable addition or adulteration other than water detected." Defendant said he was in the act of replenishing the keg when the Inspector called. He had put water into it, but not the measure of gin when he was called away. He never had any fault found with his spirits, only he was occasionally told by his customers that he sold it too strong. In answer to the Bench, Mr. Oddy said he never supplied anyone with the gin, except the Inspector. The Chairman said the Bench could not get over the fact that the gin had been supplied to the Inspector, and imposed a fine of 1s. and costs.—Oliver Applevard, of the Prince of Wales Inn, was summoned for selling brandy 32½ degrees under proof, and whisky 28½ degrees under proof. On the 25th September Inspector Gamble purchased the spirits at the above inn. They were served by the landlord, and witness made the statutory statement that he had bought the spirits for the purpose of having them analysed. The certificate from Mr. Allen stated that the alcoholic strength of the whisky was 33½ degrees under proof, the legal strength being 25; and brandy was 32½ degrees under proof, the legal strength being 25. Defendant said he had not long been in the possession of the house, and had got wrong in his calculation. Fined 1s. and costs.—Richard Wells, of the White Horse Inn, was charged with selling whisky 30½ degrees under proof. The Inspector produced the Public Analyst's report, and a fine of 1s. and costs was imposed.

These instances of stultifying the Adulteration Acts and bringing the law into contempt ought to be brought to the notice of the Lord Chancellor by protest from this County Council, who, by such fines are absolutely mulcted in penalties for endeavouring to protect the public from fraud.

Following these cases come more like cases at Gooles:—

The Magistrates responsible for the following were Mr. Ralph Greyke (Chairman), Hon. A. F. Hood, Dr. Blair, Mr. John Taylor, Mr. J. T. Norwood, and Mr. T. Huntington, who on November 1st, sat to hear a charge against Peter Dougherty, Canal-tavern, by Inspector Wilson, who prosecuted him for two offences under the Food and Drugs Act, viz., with selling whisky 51½ degrees under proof, and gin 56 degrees under proof. This was equal to 32½ per cent. of water added in addition to the maximum allowed by the Act, which is 35. There was, therefore, more water than gin, and also more water than whisky. Defendant admitted the offence, and said he did not understand the law. He was away from home, and trusted to others to manage as he would have done. The Chairman: But people who buy whisky and gin off you get more water than spirits. It may be all the better for them, I daresay. Defendant: It is not wise to give it them too strong in our neighbourhood. It's a queer neighbourhood is ours. The Chairman: Perhaps so, but you should not make your spirits less strong by these means. Defendant was fined 6d. in each case, and costs.

In a previous case they fined the offender also 6d. Will the Local Government Board direct the Lord Chancellor's attention to this disgraceful stultification of Acts designed to protect the public from fraud?

SOMERSET HOUSE AND VINEGAR.

On November 3rd, at the Bedlington Petty Sessions, Andrew Short, provision merchant, Guide Post, was charged with having committed a breach of the Food and Drugs Act by selling vinegar adulterated to the extent of 45 per cent. of another source, at Guide Post, on August 15th last. Mr. W. Brett, Morpeth, appeared for the prosecution, and Mr. H. G. Tanner, Birmingham, for the defence. The case was adjourned from last court for the purpose of submitting a sample of the vinegar to Somerset House for analysis. Mr. Pattison, the County Analyst, had stated the vinegar to be diluted 45 per cent. The following statement was received from the Somerset House authorities:—"The sample of vinegar referred to in your communication of the 10th inst., and marked 'No. 3 malt vinegar, Morpeth,' was received here on the following day. The sample was carefully sealed. We hereby certify that we have analysed the vinegar, and declare the result as follows:—Acetic acid, 3.90 per cent.; total solids, 2.22 per cent.; mineral matter (ash), 0.276; phosphoric acid (P 205), 0.0153; specific quantity, 1015.0. From a consideration of the results of the analysis, including ash and extractive matters, we are of opinion that the vinegar does not contain any added acetic acid, and we are further of opinion that it corresponds with malt vinegar made from malt and unmalts grain. Witness our hands this 28th day of October, 1893.—(Signed). B. Bannister, F.I.C., F.C.S.; G. Lewin, F.I.C."—The Magistrates dismissed the case.

IMPORTANT TO MILK DEALERS.

At Swindon Petty Sessions, on Nov. 2nd, the Chairman, A. de Hussey Freke, Esq., read a lengthy written judgment in the case of Ward v. Hiatt, heard a fortnight earlier before himself and Mr. Morse. They had decided, they said, to convict defendant, and proposed to shortly set out their reasons, as the case was not free from difficulty. The charge against defendant was that he sold, by the hands of James Douglas, his servant, or agent, milk not of the nature demanded, water having been added. The facts of the case were then detailed. Defendant, it was stated, deposed in his evidence that the milk was an equal mixture of skimmed and pure in accordance with the terms of his contract with Frost, the consignee, but in cross-examination admitted that since the taking of the sample Frost had claimed that the milk to be supplied was to be pure. For the defence three points were raised—(1) that Hiatt did not sell to Ward, and that if Douglas sold a pint of milk it was without his authority; (2) that Douglas was not the agent of Hiatt within the meaning of sections 14 and 15 of the Food and Drugs Act, 1875; and (3) that the summons was bad as it alleged a sale by Hiatt "by the hands of Douglas, his servant or agent." By the decision of Rouch v. Hall, directly Ward stopped the milk he was entitled to a sample; as soon as he obtained one he became a purchaser from Hiatt, the consignee, and was not obliged to go through the formalities of sections 14 and 15 of the principal Act. Not content, however, with relying on the 3rd section of the amending Act, he attempted to purchase from Hiatt a pint of new milk, for which he paid 1½d. The Bench found, therefore, dealing with defendant's first point, that Douglas sold the milk under compulsion; that Ward had no power to enforce the sale; and that the sale, if made, was bad, being made without Hiatt's authority. They found, on the other hand, that Ward, under the compulsory powers, took a sample from the churn entrusted to Douglas by Hiatt; that as soon as that sample was taken there was by law a demand by Ward for the article which Hiatt was under contract to supply to Frost's milk; and that Hiatt supplied, and by implication of law, sold to Ward an article not of the nature demanded, milk, but milk adulterated with water. As to the second point, they found that Douglas was not the servant or agent of Hiatt within the meaning of sections 14 and 15, but those sections had no application to proceedings like the present. Coming to the third point, which was more difficult, the summons ought in strictness to have charged Hiatt with selling to Ward a pint of milk, omitting the words, "by the hands of Douglas, his servant, or agent," which words were at any rate unnecessary, and were stated on behalf of defendant to be so incorrect as to vitiate the summons. They thought Mr. Ward acted perfectly right towards the defendant in complying, though not obliged to, with the formalities of sections 14 and 16, because that gave every opportunity to the defendant of a separate analysis, and they considered that the insertion of words referring to Douglas (which were inserted in the summons in brackets), so far from misleading the defendant, were calculated to enlighten him as to the alleged offence, for it might well be that he was unaware that he had, owing to statutory enactments, become a seller to Ward. "We therefore hold," continued the judgment, "that as the offence proved against Hiatt is the same offence as that stated in the information, the summons is not vitiated by the words objected to. We, therefore find Hiatt guilty of the adulteration alleged against him. He is liable to a fine of £20, and we cannot shut our eyes to the fact that if James Ward had arrived in Cromwell-street later that day and taken a sample from this churn by purchase from Frost, a morally innocent person would have been summoned before us for milk adulteration and been totally unable to prove his innocence. We therefore fine the defendant £5 and £2 0s. 6d. costs, but as the points raised by the defence are important, we are willing to state a case if the defendant requires it." Mr. Boodle, on defendant's behalf, applied for a case to be stated, and the Magistrates concurred.

A LARD WARRANTY CASE.

At Castle Eden Petty Sessions, on October 28th, Samuel R. Vann, grocer, Thornley, was summoned by Mr. Benjamin Scott Elder, Chief Inspector under the Food and Drugs Act for the county of Durham, for that he did on the 12th July last sell a certain quantity of lard which was alleged to be adulterated. Mr. Elder, in stating the case, said that it had been adjourned on a mutual understanding for six weeks. When analysed, the lard in question was found to contain five per cent. of beef fat. The certificate of the Analyst was put in. Mr. A. T. Crow said that he was for defendant, and would save both Mr. Elder and the Court no little trouble by informing them that although at first it was intended to take a defence on a warranty, this had been withdrawn. Mr. Vann had ascertained that his manager had obtained the lard in exchange to oblige another shopkeeper for bacon. From whence the lard came could not be found out, and defendant therefore did not intend to further contest the complaint of Mr. Elder. Mr. Vann threw himself on the leniency of the Court, and in extenuation Mr. Crow said further that his client had been in business thirty years, and never in that time had the least allegation been made against him of conducting his business otherwise than in a straightforward manner. The present offence had arisen from error, which Mr. Vann regretted. Mr. Crow hoped that the Bench would consider all that had been said, and that if they were determined to convict he asked them to make the fine as low as possible. The Chairman said defendant could not be altogether let off. What Mr. Crow had said was certainly in his favour. Defendant would have to pay a fine of 20s. and costs.

THE MANCHESTER WHOLESALE CO-OPERATIVE SOCIETY, AND EXCESS WATER IN BUTTER.

At Skipton Police-court, on October 28th, before J. Coulthurst (in the chair), J. Slingsby, T. H. Dewhurst, M. A. Wilson, J. B. G. Tottie, G. S. Taylor, and J. G. Oddy, Esqrs., Robert E. Dawson, in charge of the Gladstone-street branch of the Skipton Co-operative Society, was summoned for selling Irish butter, not of the substance or quality demanded by Inspector A. Randerson, and thus infringing Section 6 of the Food and Drugs Act, 1875. Mr. Hiley, of the firm of Williams and Edwards, West Riding, solicitors, prosecuted on behalf of the West Riding County Council; and Mr. Reed, of the firm of Learoyd and Co., solicitors, Huddersfield, defended on behalf of the Manchester Wholesale Co-operative Society, and the butter traders of Ireland.

The facts of the case were as follows: On September 8th, Inspector Randerson called at the Gladstone-street branch of the Skipton Co-operative Society, and purchased a pound of Irish butter, for which he paid 1s. 2d. He informed the shopman of the purpose for which he required it, and, in accordance with the Act, divided the sample into three parts, one of which he forwarded to Mr. Allen, the County Analyst, whose certificate of analysis gave the percentage of water as 24, being 8 per cent. more than the usually accepted standard.

Mr. Hiley, commenting on the above-mentioned facts, said the County Council contended that if the percentage of water in butter exceeded the limit of 16 per cent., it amounted to a very serious adulteration, and one against which the public should be protected. The fraud of adding excessive water has lately occupied the attention of the authorities and several prosecutions had taken place in the West Riding.

Inspector Randerson was called to prove the purchase of the butter, and to prove the receipt of the certificate of analysis which he put in. This stated, in addition to the amount of percentage, that the sample was genuine butter in the sense that it was unmixed with other than the proper ingredients, but that it contained an undue proportion of water. The sample, the certificate continued, was analysed before any change had taken place in the constitution of the article that would interfere with analysis.

Cross-examined by Mr. Reed: He did not know the butter he saw in the shop was Irish butter, but the shopman informed him that that was so. He had no particular desire for Irish butter, neither had he been specially instructed to look out for Irish butter.

Mr. Allen, the Analyst, was next called, and said the amount of water contained in the sample forwarded to him for analysis was a very unusual quantity. No butter should contain more than 12 to 14 per cent., and at the outside, 16 per cent. of water. It was only during the last few years that he had seen anything of this excessive introduction of moisture into butter. Prior to two years ago, he never found, for a period of 14 years, any of the hundreds of samples that he analysed contain too much water. The amount of water in the sample he analysed could not be accounted for except by having been put there purposely to give weight.

Cross-examined by Mr. Reed: There was no common form of agreement among Public Analysts as to the standard of moisture in butter, but 16 per cent. was the very utmost limit allowed. The Society of Public Analysts, of which he was a member, was a society of scientists and not a trades union. There was an article sold for the express purpose of enabling butter to hold water. He could not tell by simply going into a shop and looking at a sample of butter whether it contained too much water. He agreed that butter churned at a high temperature would be likely to contain more moisture than if churned at a low temperature.

Re-examined by Mr. Hiley: He had analysed nearer 2,000 than 1,000 samples of butter during his experience, and he was of opinion that the quantity of water put in the sample in question could only have been put there for the purpose of increasing weight.

Mr. Reed then addressed the Bench for the defence, remarking, at the outset, on the very great importance which was attached to a case of that sort. He had brought witnesses from Ireland at a great expense to state to the Bench that fraud was never intended in the slightest degree, for, as members of the Butter Buyers' Association, they wished in all cases where there had been fraud that the persons guilty should be punished, that being the only means of preserving the staple industry of Ireland. If the standard of 16 per cent. had to be adopted, then the butter buyers of England could not purchase butter from Ireland, and they would be compelled to go to Denmark and other places where better appliances were used by the butter makers for extracting moisture. What was demanded in that case was Irish butter, and the evidence of experts was that Irish butter for 20 or 30 years had remained the same in the matter of the water it contained, and on that account was sold more cheaply than Danish and other butters. Mr. Reed hoped to point out that the Bench was not bound to accept the certificate of the Analyst, and cited a case where the evidence of practical butter makers as to the impossibility of extracting moisture from Irish butter in the absence of special appliances, was preferred to the evidence of the Analyst himself. He also quoted from the Act, to prove that unless the Bench found that the water had been fraudulently added, then the case must fall. Since the sample was analysed, Mr. Stokes, a Justice of the Peace for Limerick, and the gentleman who purchased this particular dairy of butter, had found that it was purchased from another county magistrate in Limerick, the latter of whom had sworn an affidavit before a justice of the peace that no water was added, and that any person in his employ who had been guilty of

such an act would have been dismissed. Mr. Reed then called evidence for the defence, the first being,

Robert E. Dawson, who is in charge of the Gladstone-street branch of the Skipton Co-operative Society. He received the butter from the Central Stores, and sold it in the same state as he received it.

E. Lund, the manager of the Skipton Co-operative Society, proved receiving the butter from the Manchester Wholesale Co-operative Society.

William Lamb Stokes, J.P., of Limerick, butter buyer for the Wholesale Society of Manchester, and treasurer to the South of Ireland Butter Merchants' Association, said the former society purchased annually from Ireland no less than 2500,000 of butter; and it was computed that the amount of money sent from England into Ireland every year for butter was £8,000,000. He remembered purchasing some butter on the 26th of August from Mr. Hartigan, a large dairy farmer of Limerick, whose butter had the reputation of being the best that went into the Limerick market. The sample in respect of which those proceedings had been taken was part of the same butter that he purchased from Mr. Hartigan. After the purchase, witness analysed the butter, but without any chemical tests, and, after 25 years' experience of testing and buying butter, he could say that the sample in question did not appear to have any excessive moisture. He had been making tests of every description to ascertain what amount of water butter actually did contain, and the average did not exceed 18 per cent. Irish butter was made principally for export. The greater number of Irish farmers who manufactured butter were farmers on a very small scale, and had none of the modern appliances that were used in other countries. They had to make their butter in dairies which were not heated in winter, and where they had no means of reducing the temperature in summer. If the temperature were anything above 62 degrees, it was very difficult to extract the moisture; and when the temperature got to 75 degrees it was utterly impossible to extract the moisture. The quantity of moisture depended entirely on the state of the atmosphere. On the 26th of August, when this particular sample was churned, the temperature was 87 degrees in the shade, and that, in his opinion, accounted for the excess of moisture.

Examined by Mr. Reed, witness, speaking as a buyer of experience, said it was impossible to manufacture butter with less than 18 or 20 per cent. of moisture. The higher the temperature got, the more difficult it was to extract the water from it. The butter having been churned on the 26th of August, which was a very hot day, there must necessarily have been a great deal of moisture in it. The principal thing to extract moisture at the temperature of the 26th August was ice, or cold water at a temperature of 50 degrees. The majority of Irish farmers had not got such appliances, and, therefore, on very hot days there was forced to be a considerable quantity of water in the butter. Hot weather had an effect on cattle themselves, making the milk of a poorer quality.

Cross-examined by Mr. Hiley, witness said the whole butter of Ireland averaged 24 per cent. of water. He would not say that his tests were as good as chemical analyses. If the Irish farmers had the necessary appliances, there would be a deal less water in the butter, and he was of opinion that the English Government ought to take the matter up and give instruction in butter-making, and also provide modern appliances. Under existing circumstances, however, it was inevitable that the butter should contain moisture. He admitted that it was common knowledge that on the 6th of October last, several butter dealers were fined in Ireland for selling butter containing 22.5, 21.7, and 22.9 per cent. of water, but in each case the water, it was found, had been fraudulently added.

Robert Gibson, a representative of Messrs. Pearson and Butler, butter merchants, Limerick, said he had been 35 years in the butter trade, and had the most modern appliances he could possibly get. He found that if the temperature were above 65 degrees it was almost impossible to get the moisture out of butter. The butter, in respect of which those proceedings were taken, he knew had not a drop of water added to it. It was ascertainable whether water had been added or not, and the butter merchants had been doing all in their power to prosecute all who were found guilty of fraudulently adding it. When butter was churned at a high temperature it was almost impossible to remove water from the butter. The particular dairy where the butter in question came from had no appliances such as cold spring water and ice; if they had, they could have prevented the excessive moisture.

Mr. Hickey, a Manchester butter merchant, agreed with the testimony of the previous witness. Respecting Danish butter, it was common knowledge in the trade that it varied in its quality of moisture from 9 to 19.99 per cent. There was no reliable data as to what the standard of moisture in butter should be, and it could only be arrived at by a commission of competent agriculturists and scientists working hand in hand and determining upon a standard. Of Danish butter 35 per cent. contained 15 per cent. of water.

This concluded the case, and the Bench retired to consult.

On reassembling after a quarter of an hour's absence,

The Chairman said they had given the matter their careful consideration and there could be no doubt at all that the defendants did sell butter containing such a quantity of water as was excessive, and, therefore, did sell to the prejudice of the purchaser. They would consequently inflict a fine of 20s. and costs.

Mr. Reed: Do your Worships find that the water was added fraudulently?

The Chairman: We find that the water was not added fraudulently, but we think that the water might have been extracted. There was excessive water in the butter, and it was not extracted as it might have been.

Mr. Reed pointed out that according to the Act the Bench must either find one thing or the other—either that the water was added fraudulently or not.

The Chairman: There is no evidence before us to show that the water was fraudulently added, though there is no doubt it was in excess.

Mr. Reed, in mentioning that he intended to appeal, said the last time he had a similar case it was remitted from the Quarter Sessions for the Magistrates to find whether, under Sub-Section I of the Act, the water was added with fraudulent intention. Therefore, he should like to have an undertaking that the Magistrates' Clerk would reduce the finding of the Bench to writing so as to obviate that danger.

The Chairman: There is no evidence that it was fraudulently added; that is what we say.

THE ADULTERATION OF LARD. A NEW PHASE OF THE WARRANTY DODGE. HOW MAGISTRATES SHIELD CO-OPERATIVE STORES.

On November 2nd, the Mansfield Bench of Magistrates (Captain Webb, Mr. W. W. Hall, Mr. W. M. Oates, and Mr. J. Whitaker) heard a case of alleged lard adulteration, brought upon the certificate of the County Analyst, Mr. Otto Hehner, against the Mansfield Woodhouse Branch of the Mansfield Co-operative Society, the certificate of the Analyst stating that a sample submitted to him by Lieutenant-colonel F. W. Story, Inspector under the Sale of Food and Drugs Act, was adulterated with 15 per cent. of beef-stearine and cotton seed oil. The case was defended on behalf of the manufacturers or refiners of the article, Messrs. Kilvert, who defended the case on its merits, and not upon any legal grounds.

Mr. Hehner gave evidence in support of his certificate, and produced in Court samples of the beef stearine which he had isolated from the sample. Mr. E. W. T. Jones, Public Analyst, of Wolverhampton; Dr. Campbell Brown, of Liverpool; and Mr. C. E. Cassal appeared as witnesses for the defendant manufacturers. They denied the presence of cotton seed oil, although Mr. Cassal admitted that there might be present something like five per cent.; but they agreed with the County Analyst as to the presence of beef stearine, differing from him as to the amount present. Mr. Jones and Dr. Brown declared the lard to be genuine, in spite of the presence of the beef stearine, while Mr. Cassal avoided giving to the lard the appellation "genuine." The manufacturer himself, Mr. N. Kilvert, while also denying the presence of cotton seed oil, frankly admitted that for stiffening purposes, his firm were in the habit of adding up to three per cent. of beef stearine to the lard, which, in its crude state, was obtained from America. He further admitted that he took no steps to ascertain the genuineness of the lard bought by them other than examining the consignments by taste and smell. The difference between the chemical witnesses, all of them Public Analysts, was therefore a matter of the actual amount of adulterant present.

How it is that Public Analysts lend themselves to the manufacturers to defend adulterations admitted by the manufacturer himself we will not now stop to discuss, but the decision of the Bench was the most remarkable thing in a remarkable case. They said, "we dismiss the case, because we are of opinion that the defendants sold the lard in the same state as they received it, protected by a warranty of genuineness."

Now the word "warranty" had been carefully avoided by the solicitor for Messrs. Kilvert, and throughout the case the warranty clause of the Act had not once been mentioned. The Bench therefore took it upon themselves, in order to let the retailers go scot free, to act the part of advocates on behalf of the Co-operative Society. It may have been that they were so puzzled by the appearance of a number of Public Analysts on behalf of a manufacturer who acknowledged having added to his lard the very article certified to by the Public Analyst for the County, that they preferred to thus dispose of the case instead of deciding upon the real merits of the matter.

It is bad enough that the Act enables any vendor to shield himself behind a warranty, the giver of the warranty knowing full well that he will not be punished, but it passes our comprehension how Magistrates, guardians of the public interest, can reconcile it with their duty towards the public to themselves point out to the responsible vendor the loop-hole left in a defective Act of Parliament, without at once taking steps to see that the really guilty parties are punished. What with magisterial vagaries and with the protection of the mixers by Somerset House, the public and conscientious traders are between the deep blue sea and the devil.

BACUP IS NOT DOING MUCH TO GIVE THE CONSCIENTIOUS GROCER FAIR PLAY.

At a meeting of the Town Council, Mr. Estcourt, the Borough Analyst, reported that during the quarter ending September 30th, he had analysed six samples—one each of milk, lard, beer, vinegar, Irish whisky, and tea. All were found genuine with the exception of the vinegar, which contained upwards of 50 per cent. of acetic acid not derived from vinegar.

There are butter, yeast, spices, drugs, etc., sold in Bacup. Why is it that no samples of these and other articles were taken and analysed.

HOW TO MAKE A GROCER'S SHOP PAY.

BY A THIRTY YEARS' TRADER.

This is a question thousands of anxious traders are asking themselves throughout the length and breadth of the United Kingdom. On every side the path of the retail dealer bristles with enemies. Colossal traders with brazen effrontery seek to deceive the public by lying advertisements that at 1s. 7d. per lb. they can sell the finest tea the world produces, although such traders know that there are teas which cost the wealthy Chinamen themselves £10 or more per pound weight. The uneducated political nincompoop of the Arnold-Forster class, stuffed with college trash, but ignorant of any real knowledge affecting the actual work of those who earn their living as re-tailers, seeks, at the expense of the retail trader, to propagate the teaching in public schools of a Co-operation the fringe of whose enormities we have only been able to touch in the astounding revelations in our leading article. The Pharmaceutical Society, coveting the little extra profit the grocer gained by the sale of patent medicines, moves the Courts by untrue pleas of regard for the safety of the public to permit only qualified chemists to sell a large number of preparations, out of the sale of which the grocer once reaped some profit. The makers of the vast army of cheap proprietary soaps who first approached the grocer with cajolery and generous promises if he would push the sale of their special wares, turned upon him the moment the particular soaps got well fixed in public favour, and raised prices to a point at which it does not pay the grocer to handle the articles. Thus, in one way or another, the grocer's lot as a trader, is about the very hardest of all. Why it is so, is worth some consideration. We shall show in this series of articles, written by a practical grocer for grocers, that the condition of the trade deplored by so many struggling grocers arises from the fact that the grocer more than any other trader has allowed himself to be exploited for the benefit of the manufacturer of proprietary articles, that he has allowed himself to be attacked, and each profitable portion of his trade encroached on without adopting his right of retaliation, and has permitted others to monopolise the sale of profitable articles, whilst he has contented himself with the drudgery, the long hours, and a starveling return for his labour and capital. What other trader, for example, is fool enough to give free advertisement to the Peek Frean's, and scores of other manufacturers, whose show-cards produced not in England, be it noted, by English workmen, but by French and other Foreign workmen, thus boycotting English labour, are displayed gratis in the windows of well nigh every grocer in this country? The colossal stores do not act so foolishly. Messrs. Spiers and Pond, The Midland Refreshment Restaurants, all Railway Companies, and large caterers everywhere throughout the country, exact a large revenue, often as much as a preliminary lump sum of several hundreds of pounds, and an after payment per show-card of 5s. to 10s. each per year for displaying such showcards. The grocers of the United Kingdom are more important to these manufacturers than are their rivals, the Spiers and Ponds and like stores, but the grocer goes on year by year giving manufacturers gratis advertisements, cramming his shops with free exhibits for the Borwick's, Peek Freans, Sunlight Soaps, &c., instead of charging a sum of 5s., 10s., 20s., or more per year, according to the position of his store and its value as an advertisement for every card shown in the shop, in the window or on the front of his premises, and if such payment be refused, bundling the show cards incontinently into the street. Grocers' Associations are grappling the almanac question in many districts, and that not before it was time. If the Associations as a body were to consider this question and agree amongst their members to give no exhibits of showcards, posters, &c., without adequate pay, they would find manufacturers at first inclined to kick, but at last be glad to pay the grocers as they do the newspapers and the billposters for the display afforded them. Upon its face it is a logical absurdity that the grocer should be content to go out of his way to give free advertisement for nothing to persons who have to pay the billposter heavily for a much less valuable display.

[TO BE CONTINUED.]

TRYING TO REACH THE SWINDLING BREWER.

The Bishop of Durham says:—

"His idea was to have a public-house where good beer should be sold along with non-intoxicants. He would rigidly exclude wines and spirits. The more he examined the question of drunkenness, the more he was convinced that it was due to the use of adulterated beer and spirits. All the brutality that made drunkenness so hideous was due to adulteration. He would take care that he who kept the house should have no additional gain from the sale of beer, but he should have every encouragement to sell other drinks."

But does His Lordship know that a prosecution for beer adulteration, thanks to Mr. Gladstone, his factotum, Sir Algernon West and the Somerset House pseudo-chemists, is impossible, and that beer may be any filthy compound the brewer chooses to call beer?

VINEGAR—WHAT IS IT? MALT—WHAT IS IT? AND WHAT IS MALT VINEGAR?

BY AN EXPERT.
(Continued from page 335.)

The word "*malt*" is derived from the Anglo-Saxon *malt-mealt* (Old Saxon, Icelandic, Swedish, and Danish "*malt*," German, "*maby*"), from Anglo-Saxon "*meltan*," to melt, to dissolve, to digest, to cook. Any cereal can be malted, and by almost as many methods as there are varieties. Barley has been the grain chiefly, but not exclusively, chosen in England, not only on account of its being more easily procured in this country, but also for its albumenoid constituent. Rye also contains a large percentage of this matter, though of a different technological character, and the amount of alcohol obtained from this grain exceeds that from barley, this, in addition to the greater facility of manipulation, being one of the reasons for its extensive use on the Continent and in America for the production of whisky. Barley being the grain more generally known in England, the public have lost sight of the fact that other descriptions can be, and are, malted, and devoted to the manufacture of the various articles for which malted grain is adapted.

I have said that there are almost as many methods of malting as there are varieties of cereals. I do not propose, however, to deal in detail with each; but, while bringing one more particularly forward, will speak generally of the remainder. Bearing in mind the great assistance which the various technical industries have derived from pure chemistry, and at the same time not forgetting the valuable stimulus to research furnished by the requirements and capital of these industries, it seems to me the time has arrived for the public to be partly taken into the confidence of the producer. I say *partly*, because he cannot be reasonably expected to give to the world working details which possibly have necessitated the expenditure of much money, labour, and patience, frequently accompanied by many failures before success is achieved. If the consumers were alone concerned, I think few manufacturers would object to this, but naturally hesitation exists to give to competitors the result of successful and costly experimental research.

The means employed to produce nearly every article of man's requirements are in most instances different from what they once were, and as a rule the variation is a distinct improvement; nothing stands still, and operative manufacture, like all else, obeys this law. This is a progressive age, and an industry either moves with the times or becomes extinct. The question now is "*progression*" or "*extinction*;" and in the vinegar industry we are face to face with this problem, shall manufacturers retain by compulsion the obsolete practices of their forefathers, or shall they avail themselves of the advances made in knowledge of production, or, in other words, shall they win the *same goal* by modern and improved means, or be restricted to the ancient systems which at the best confer no superiority, even if equality? Some there are among the Public Analysts, who go so far as to set up an arbitrary standard of their own, and with old-time intolerance insist upon producers being tried by their measures.

I do not think that it is disputed that all cereals can be, and most of them are, malted; the process followed up to the last few years, being to steep the grain in a *cistern*, where it remained until well wetted, it was then thrown into the "*couch*," this being of similar construction to the cistern, but not made to contain water, in this it rested for some time, and was then spread upon the floors of the malthouse in an even thickness, being occasionally turned over as required, until germination had proceeded far enough, when it was sent to the kiln, and there dried by a regulated temperature. This system has been greatly modified for the better by the introduction of pneumatic malting—surely, no one would deny that the output of the latter method is "*malt*," though obtained by a different road? During development of the germination above described, a peculiar albumenoid matter named "*diastase*" is formed, which occurs in all cereals under similar conditions, not in barley alone, but in rye, maize, rice, oats, &c., also in the eyes of growing potatoes, and below the buds of the *Alyanthus glandulosa*, and is by some chemists declared identical with a constituent of human saliva. Diastase was first discovered and isolated by Payen and Persoz in 1863, so that prior to that period, brewers and others were using a matter they only knew of by its effect, but could not name. Diastase, from whatever source derived, has the power of hydrating or saccharifying the starch constituent of grain, this change being termed "*hydrolysis of starch*," as it brings about the assimilation of hydrogen and oxygen in the proportions which form water. My reason for detailing the foregoing, is to demonstrate later on, that it is not the *means employed*, but the *result*, which should characterise the nomenclature of an article: and in the hydrolysis of starch yielding "*maltose*," "*dextrose*," "*starch sugar*," name it as you will, the means by which such hydrolysis is accomplished, does

not genuinely affect the final result. Asserting that hydrolysis *must* be by diastasic action is tantamount to saying that the only purpose of germination is to obtain diastase, whereas, if it could practically be obtained without germination, it would be equally well suited for the purpose, consequently, it is not *germination* that is insisted on or desirable, but *diastase*, and if this were isolated and placed upon the market as a commercial manufactured article, we should have all that is required to bring about legitimate hydrolysis of starch, no matter whether extracted from barley, wheat, rye, &c. (one other source being too nasty to repeat) and the result would demonstratively and indisputably be "*malt sugar*." I presume that it is this which is in the minds of some of the Public Analysts when admitting that a mixture of germinated (germinated solely for the production of diastase) and ungerminated grain results in a *malt* product: I use the word "*germinated*" in preference to "*malted*" or "*unmalted*," as I hold that the "*malting*" takes place in the process of brewing, for that "*to malt*" is "*to melt*, to dissolve, to digest, to cook." Now I will follow this out to its logical conclusion by endeavouring to show by illustration, in what estimation diastase is held by the brewers of beer after it has accomplished the work for which it was called into existence, and as his is a correct appraisalment, this will serve all purposes. Its desired work ended, the brewer boils his wort (solution of malt sugar and albumenoids), with hops, this brings about a partial coagulation of the albumenoid matters, including the now useless and objectionable diastase, the presence of which in the finished beer would probably induce an undesirable change. In passing, I may remark that the beer of old England was made in the early days of brewing without hops, the use of these being introduced much later to assist keeping qualities by removing some of the nitrogenous matter, but *beer* was still admittedly "*beer*," though an advance was made in its *method* of manufacture. The modern scientific brewer made yet further improvements by the judicious use of calcium bi-sulphite, which precipitates a still further portion of this matter, and gained a better keeping beer. This, to my mind is an important point. In my last communication to your deservedly widely-read journal, I endeavoured to show that it was *alike* in the interest of the producer and the consumer to put upon the market a manufacture free from impurities, and of permanent keeping qualities; I said that albumenoid matter and phosphates were the most objectionable therefore, diastase being one of these, it is as of much moment to a vinegar maker as to the brewer to be quit of its contamination; but as the vinegar maker does not boil his wort with hops, his task is rendered more difficult, and as perhaps he can only partially free his vinegar from it, he must either put up with a mitigated evil, or seek another hydrolyst, which, while giving him goods of equal quality, admits of easier and more perfect elimination, and if he is successful in his search it is evident that he should make use of it, seeing that the hydrolysis of the available matter is the same in any case, and the expulsion of any hydrolyst employed desirable, even if it has the awful effect of depriving the analytical chemist of his means of inferring origin. As an illustration of the more modern liberal and intelligent construction upon what "*malt*," is, I refer to the fact that in the market for brewers' materials we find "*torrified maize malt*," "*flaked maize malt*," "*torrified barley malt*," &c., none of which contain diastase, nor have they been germinated, and yet are offered publicly as "*malt*," and are extensively used by brewers, and form materials of a large and important industry. Who would decide to *disturb* such a manufacture, not only intrinsically valuable for its purpose, *but representing also a very large invested capital*, and giving employment to a large number? Who would take upon himself to dictate that the nomenclature applied and founded upon accepted dictionary derivation is incorrect?

Lamb tells us that the first Chinaman who acquired a taste for roast pork did so by tasting a pet pig, cooked by the accidental burning of his house. The flavour pleasing him he continued the burning of his house, until he discovered that pork could be equally well roasted at the kitchen fire. At one time copper and other metal articles were plated by having a thin sheet of silver rolled or mechanically laid on, and were named "*silver plate*:" this *method* in the course of time was discontinued, it being found that silver could be deposited by electricity. I will conclude my remarks by saying that it would be as reasonable to say that the Chinaman's roast pork was not roast pork because no longer cooked by a burning house, or that an article is not silver plate unless plated by the original method, as to assert that vinegar made by the hydration of the starch of grain (malt sugar) is not malt vinegar unless the hydrolysis had been brought about by diastase, the presence of which in the finished vinegar is most undesirable.

The sooner it is universally recognized that "*malt vinegar*" is vinegar obtained by the alcoholic fermentation of malt sugar, such malt sugar being previously procured by hydrolysis of the starch of any cereal, the better for makers, sellers, and consumers.

SPECIALLY COMMENDED TO NOTTINGHAM MAGISTRATES.

Our complaint that Magistrates do evil often by more want of thought than by want of heart, receives striking corroboration in the report recently presented to the Nottinghamshire County Council by the Duke of St. Albans. We have over and over again pointed out the great injustice done to conscientious grocers by the inadequate fines Magistrates inflict in grave cases of fraud upon the public, and we have shown that not only are such fines a direct encouragement to the unscrupulous trader to swindle the public, but that they are a penalty upon the authorities who enforce the Acts. The honest trader as well as the public has a right to such protection as the law allows, but with 5s. to 10s. penalties, it pays the unscrupulous keeper of a shop to pursue a fraudulent trade, bring an honourable calling into disrepute, and undersell the grocer who sells genuine articles. In the report he presented, the Duke of St. Albans said that the Inspectors had during the quarter verified and stamped 516 weighing instruments, 5,538 weights, 249 scales, 995 measures, and adjusted 1,464 weights. The fees received for this purpose amounted to £63 16s. 4d. There had been four convictions for having unjust scales, and one conviction for having unstamped scales and weights. There had also been four convictions under the Bread Act. The County Analyst had analysed 57 samples under the Sale of Food and Drugs Act, including eleven spirits, 17 vinegar, 13 milk, six butter, five coffee, three lard, one mustard, and one tea. Of these 22 were adulterated. Ten of the eleven samples of spirits were adulterated with two to 18 per cent. of added water. Four of the vinegar samples were imitations, six of the samples of milk were adulterated from six to 20 per cent., one sample of butter was adulterated, as was also one sample of lard. The Duke wished to express the general feeling of the Committee that in cases where convictions were obtained and proved before the county and borough benches, adequate sentences might be inflicted. It was obvious that a considerable profit must attach to those who with impunity carried out adulteration of spirits and other matters. The county were now placed to a considerable cost in trying to preserve the public from those fraudulent adulterations and imitations, and the committee would appeal that in cases where convictions were secured the fines might be such that they might deter other persons from a commission of these offences.

We wish there were more county magnates taking a similar patriotic and far-seeing interest in England's welfare. We have had to say hard things of Nottinghamshire in the past. We are glad to be able to record this good work for English industries.

BAKING POWDER AND ALUM.

At Caerphilly, on October 28th, Messrs. Hopkin Enoch, John Rees George, and Henry Coggins, of Caerphilly, and Gwilym Austin, of Nelson, grocers, were respectively summoned by Superintendent E. Jones for two offences under the Food and Drugs Act, viz., for selling baking powder not of the nature, substance, and quality demanded, and for selling baking powder which was injurious to health. Mr. Allen, deputy clerk of the peace for the county, appeared to prosecute, and the defendant, Mr. Gwilym Austin, was represented by Mr. Spowart, of Pontypridd. The Bench convicted, and fined the defendants 5s. and costs—£2 5s. each.

CORRESPONDENCE.

RE "A VERY PECULIAR VINEGAR CASE."

WHERE WAS THE ACETIC ACID ADDED?

To the Editor of Food and Sanitation.

SIR,—I appeared for the defendant herein, and also for Messrs. Wilkinson and Simpson, the firm who supplied the vinegar to the defendant, and not Mr. Henry Wilson, as in your report. I think it only fair to my clients, Messrs. Wilkinson and Simpson, that an explanation should be inserted in your next issue, as it would seem from your report that the vinegar in question was manufactured by them. This is not the case. Messrs. Wilkinson and Simpson do not manufacture vinegar, and never have done. The vinegar was supplied to them by Messrs. Champion and Co., Limited, which was proved at the hearing of the case, and was sold to the defendant in precisely the same state as received from Messrs. Champion. The defendant also sold the vinegar in the same condition as she received it from Messrs. Wilkinson and Simpson, which was also proved at the trial. I cannot understand why Messrs. Champion's name as manufacturers of the vinegar did not appear in your report, as it was mentioned many times during the hearing, and especially when the labels were produced and branded casks referred to by nearly all the witnesses. Your report does not even mention by name for whom Mr. J. Simpson (from Mr. Lambert's office, Gateshead) appeared; it merely says he appeared for "the wholesale firm." Of course, those who had to do with the case know that Messrs. Champion were meant, but outsiders could not possibly know. My clients, Messrs. Wilkinson and Simpson, have been subjected to a great deal of annoyance through the unsatisfactory way in which the case was reported, so that I trust, in justice to them, you will insert this letter in full.—I am, Yours &c.,

HERBERT WILKINSON,
Solicitor.

Newcastle-on-Tyne, November 7th.

With regard to this case, Mr. Wilkinson assures us that it was proved conclusively at the hearing that the vinegar was not adulterated by either Messrs. Wileason and Simpson or by Mrs. Gray. We used the only newspaper report sent us, and have to express our regret that our deductions and comments should have been regarded by Mr. Wilkinson's clients as injurious to them.—EDITOR.]

HOW TO SEND SAMPLES FOR ANALYSIS.

To the Editor of Food and Sanitation.

SIR,—Kindly inform me if you consider the requirements of the Food and Drugs Act met with by an Inspector forwarding his samples to the Public Analyst by rail when the Analyst lives more than two miles away.

It would seem, by the report of a case at Pontypool, that there is some doubt on the point. I have always forwarded my samples by rail, and no objection has ever been raised.—Yours truly,

FOOD INSPECTOR.

[Answer.—Section 16, Food and Drugs Act, 1875, says: "May be forwarded," not "must be forwarded." We doubt whether the Pontypool decision would be upheld were it appealed against; but to avoid risks we would counsel that samples be sent by registered post in such cases.]

A NICE POINT.

To the Editor of Food and Sanitation.

SIR,—Under Section 6 of the Food and Drugs Act, 1875, in order to secure a conviction, the article sold must be not of the nature, substance, and quality demanded. A demand, therefore, would appear to be a condition precedent to a valid sale. Section 17 provides a penalty on the person exposing "any article of food or any drug" to sale or on sale by retail on any premises.

Can an auctioneer of cheese who may by auction sell a less quantity than a whole cheese be brought within either of the above sections? Can the necessary demand be made in such a case? or does section 6 refer only to a retail dealer in a shop? Does sec. 17, which is to meet the case of a man refusing to sell under section 6, inferentially say by the words "by retail," that the offence can only be committed in a retail shop? If an auctioneer sell a whole cheese, not by auction, but to a person calling at his auction rooms, which may not be of the nature, &c., demanded, would he be liable under section 6, or would it be a good defence for him to say that he did not sell by retail, but wholesale only to the extent of an entire cheese?

SANITAS.

[Answer.—Cheese is defined in Smith, Foods, p. 120, as "obtained exclusively from the milk of animals." If the auctioneer sells a cheese a substance containing margarine, such an article is not of the nature, substance and quality demanded, not being cheese. The purchaser, however, would have to ask for cheese before a prosecution could ensue. Page 46, Vol. II. Food and Sanitation, records a conviction for the sale of margarine cheese. By referring to back numbers of Food and Sanitation you will find instances recorded where prosecutions have been successful against wholesale dealers.

Section 6 of the Food and Drugs Act, 1875, says: "No person shall," &c., thus embracing the wholesale as well as the retail vendor. Section 17 reads, "If any such officer, inspector, or constable, as above described shall apply to purchase any article of food or any drug exposed to sale, or on sale by retail on any premises or in any shop or stores, and shall tender the price for the quantity which he shall require for the purpose of analysis, not being more than shall be reasonably requisite, and the person exposing the same for sale shall refuse to sell the same to such officer, inspector, or constable, such person shall be liable to a penalty not exceeding ten pounds."

Under this section we do not think it would be a good defence to refuse to sell less than an entire cheese, or to plead that selling wholesale the vendor was outside of the Act.]

Mr. F. G. Adair Roberts, partner in the well known firm of A. Boake Roberts and Co., Stratford, London has just been elected to a seat on the West Ham Town Council, his election giving general satisfaction to his fellow townsmen who hold his ability and business acumen in high esteem.

POWELL'S BALSAM OF ANISEED—FOR COUGHS.

Powell's Balsam of Aniseed—Coughs and Asthma.
Powell's Balsam of Aniseed—Coughs and Bronchitis.
Powell's Balsam of Aniseed—Coughs and Hoarseness.
Powell's Balsam of Aniseed—Coughs and Lung Troubles.
Powell's Balsam of Aniseed—Coughs.—Safe and Reliable.
Powell's Balsam of Aniseed—Coughs.—Established 1824.
Powell's Balsam of Aniseed—Coughs.—Refuse Imitations.
Powell's Balsam of Aniseed—Coughs.—Sold by Chemists.
Powell's Balsam of Aniseed—Coughs, Night Cough, Influenza.
Powell's Balsam of Aniseed—Coughs Relieved Instantly.
Powell's Balsam of Aniseed—Coughs.—The Oldest Remedy.
Powell's Balsam of Aniseed—Coughs.—Trade Mark.
Powell's Balsam of Aniseed—Lion, Net, and Mouse.
Powell's Balsam of Aniseed—1s. 1½d., 2s. 3d.

GUARANTEED ABSOLUTELY PURE.

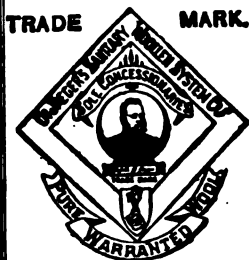
Warranted to stand any Analytical test. A natural product ensuring perfect digestion not possible in the various manufactured Acetic compounds

SICILIAN WINE VINEGAR.
Can be supplied in tated
Write for Samples and Price to Sole Proprietor at the
72, Mark Lane, London, E.C.

READ & DIGH

beer
ger-
pos-
wer

TESTED FOR PURITY NON-SHRINKING AND STRENGTH

Protection from Chill in all Climates.**JAEGER PURE WOOL CLOTHING.***The Best is the Cheapest!
Fixed, moderate prices for first quality.*

The "JAEGER" Goods are tested for Purity in the Company's own Laboratory, and Guaranteed by this Trade Mark, without which none are genuine.

Dr. Jaeger's "Health Culture," and Jaeger Company's Price List, sent free on application.

WEST-END JAEGER DEPOTS:3 & 4, PRINCES STREET, CAVENDISH SQUARE (near Regent Circus).
126, REGENT STREET (near the Quadrant).
80, SLOANE STREET (adjoining McPherson's Gymnasium).
456, STRAND (near Trafalgar Square).**CITY JAEGER DEPOTS:**85 and 86, CHEAPSIDE (near King Street).
158, FENCHURCH STREET (near Lime Street).
42 and 43, FOLEY STREET (near Moorgate Street Station).

PURE YEAST **Trade MARK NG & SF** PURE YEAST
Mark

Use 4 ozs. to 280 lbs. Flour, second turn in winter.

For doughing direct, and other methods of working, address—

W. HEPWORTH, Harwich, Essex.

Most powerful Yeast known.

SUPERIOR FLAVOUR. LONGEST KEEPING.

Highest Awards, Healtheries, London, 1884.

LONDON, 1893 (this Year).

LARGEST YEAST WORKS IN THE WORLD.

DISINFECTION WITH 'SANITAS'

A very careful investigation just made by Dr. A. B. GRIFFITHS proves that "SANITAS" DISINFECTANTS, readily kill all Disease Germs, including the Microbes that cause

CHOLERA, FEVERS & DIPHTHERIA.**"SANITAS" DISINFECTANTS**

are Fragrant, Non-poisonous, and do not stain. They embody all the healthful principles of Pine and Eucalyptus Forests, and are the best for general use.

Copies of Dr. GRIFFITHS' REPORT, together with full particulars of

"SANITAS" DISINFECTANTS & "SANITAS" APPLIANCES

Will be sent free on application to

The "SANITAS" Company, Lim., Bethnal Green, LONDON, E.**Food and Sanitation.**

SATURDAY, NOVEMBER 18, 1893.

Mr. W. T. STEAD.—THE MATTEI CANCER CURE SWINDLE.—AND THE DRUNK CURE.—III.

In our last article we showed that the connection between Mr. W. T. Stead and the Mattei swindlers existed up to a month ago, and this, despite Mr. Stead's assertions to Dr. G. W. Potter and the medical men forming the Mattei Investigation Committee that he "was thoroughly ashamed of his champions," "that he was there to convict them of falsehood, and to denounce them before the whole professional and non-professional worlds." We proved that Mr. Stead must have deliberately lied to Dr. G. W. Potter and the Medical Committee, because *fourteen months* after his assurance that he was ashamed of his champions, and would convict them of falsehood, he acted as journalistic tout for another quack nostrum, and recommended the public to buy it

Chafed Skin, Piles, Scalds, Chilblains, Chapped Hands, Neuralgia, and Rheumatic Pains, Sore Eyes, Ear-ache, Cuts, Sunburn, Insect Bites or Stings, Throat Colds, and Skin Ailments quickly relieved by use of

CALVERT'S CARBOLIC OINTMENT,
Large Pots, 13d. each, with full Instructions.

Court Circular says: "We cannot too highly recommend Calvert's Ointment. It is the best general Ointment with which we are familiar, and ought to be a stock remedy in every household."

Private report from Limassol Cyprus: "I have never found anything to come up to it for neuralgia and 'Rheumatic Pains.'"

Samples sent Free by Post on receipt of value.

F. C. CALVERT & CO, MANCHESTER.
Awarded 60 Gold and Silver Medals and Diplomas.**TRUE RECIPROCITY!**

OR HOW TO MAKE HAPPY ENGLISH HOMES.

If all the Smokers of American Manufactured Cigarettes were to smoke our

"SILVER VEIL,"

or other English Brand, employment would be afforded to Thousands of respectable and deserving English Girls, besides a large amount of additional adult labor.

Why support the product of a country which brags of its McKinley Tariff Bill, introduced to devastate English manufactures.

Why not, rather, smoke Cigarettes made out of precisely the same Tobacco, but rolled in English Factories by English Girls, and pay back in its own coin Grab-all Yankeeism.

OGDENS' FACTORIES, LIVERPOOL.

from the very gang of Mattei swindlers whom he previously professed himself ashamed of, and pledged himself to convict of falsehood. There is no use beating about the bush in this matter. The evidence is indisputable: that Mr. W. T. Stead is a dangerous and pestilent quack—dangerous by reason of his undoubted journalistic talents, and pestilent by the shameful use to which he has prostituted them in propagating successfully the meanest of swindles under the guise of morality, religion and regard for the public wellbeing. Only the most abandoned hypocrisy, allied with an absolute lack of any sense of shame could have enabled Stead to go to the lengths he has done in "booming" this Mattei Swindle. He is now asking 100,000 persons to be foolish enough to entrust him with £1 6s. each, or a total of £130,000 to enable him to start a new paper. In a specimen number of the proposed "Daily Paper" we see that p. 36 is devoted to a highly eulogistic interview with Mr. A. J. L. Gliddon, who sells Mattei's swindling nostrums in England, whilst p. 38 is given up to a eulogy of the drunk cure nostrum, also worked by Mr. Gliddon. Now we wish to put a plain question to the thrifty, devoted, earnest men and women who by one means or another have been led to believe in Mr. Stead's integrity and sincerity, and in whom he hopes to find dupes to the extent of £130,000, to be placed in his, Mr. Stead's hands without security of any kind save Mr. Stead's word. Fourteen months ago, Mr. Stead professed that he would denounce the Mattei swindlers. That he deliberately lied to Dr. Potter and the other members of the Mattei Investigation Committee, pages 36 and 38 of his proposed journal, "The Daily

Paper" prove, as also his letter to the *Daily Chronicle*. We have stigmatised Stead as a charlatan, but he is worse than that. Barnum was one, but of a bluff, keen, and in the main honest sort. Stead's charlatanism is none of this. Letters have rained in upon us excusing Stead's share in the Mattei swindle by the plea that he is emotional, transparent as crystal, and that anyone can deceive him. These pleas are not true, and even if they were, they do not excuse Mr. W. T. Stead's present advocacy of swindles which have been proved to him were swindles, and which he further pledged himself to expose. Now we have to ask the Nonconformist world this question. Is a person guilty of this kind of conduct a fit person to whom to entrust £130,000 without any security whatever beyond his bare word? One who will lie in one matter will lie in another. The Nonconformist world has been the victim of one gang of swindlers who have robbed the widow and the orphan, reverend gentlemen who have fattened on public plunder, disinterested seekers after truth, whose peals of bells testify in Croydon to their piety, whilst one scoundrel expiates his crime as a convict, and another guards himself with hired mercenaries in South America to prevent his being extradited for fraud. Has not Nonconformity been ashamed enough? Has it not been dragged deep enough into the mire? Are there not thousands of homes suffering from the depredations of the Jabez Spencer Balfour thieves, without more shame being brought upon Nonconformists, and their money being used by a journalistic quack nostrum agent in advance to eulogise, advertise, and work into public favour Mattei swindles? Since our last article we have received some further analyses of these Mattei impostures. Dr. John Clark, Public Analyst, Glasgow, writes thus:—

To the EDITOR of FOOD AND SANITATION.

City Analyst's Laboratory, 188, Bath-street,
Glasgow, 14th November, 1893.

SIR,—As I observe Count Mattei's Cancer Cures have been attracting a considerable amount of attention lately, I enclose the results which I obtained some time ago on subjecting seven Mattei tubes of globules to a careful analysis at the request of a cancer specialist. The tubes were marked, respectively, as under:—

- | | |
|-----------------------------|-----------------------------|
| (A) "Antiangioitico, N. 1." | (E) "Anticanceroso Doppio." |
| (B) "Antiangioitico Nuovo." | (F) "Anticanceroso, E." |
| (C) "Anticanceroso, No. 5." | (G) "Anticanceroso, N. 10." |
| (D) "Anticanceroso, No. 6." | |

The following are the results:—

ANALYSES.				
	A	B	C	D
	Per cent.	Per cent.	Per cent.	Per cent.
Cane Sugar ..	90.10	84.00	76.02	80.68
Insoluble Albuminoids ..	3.50	10.00	Traces	.50
Soluble do. ..	None	None	None	None
Rice Starch ..	1.75	2.50	12.20	11.20
Sulphate of Lime ..	1.50	.83	6.69	2.23
Moisture ..	2.00	1.65	1.79	3.12
	98.85	98.98	96.70	97.73
	E	F	G	
	Per cent.	Per cent.	Per cent.	
Cane Sugar ..	79.84	81.09	78.42	
Insoluble Albuminoids ..	.40	.70	.80	
Soluble do. ..	None	None	None	
Rice Starch ..	9.26	14.81	16.80	
Sulphate of Lime ..	2.60	.41	.52	
Moisture ..	6.68	.41	.52	
	98.78	97.42	97.06	

From the results of my analyses, I am of opinion that the seven cancer cures, above referred to, contain nothing but sugar, starch, sulphate of lime, water, and a little albuminous matter; and although there is apparently a slight loss in each case, this is sufficiently accounted for by the small quantities of the cures on which it was necessary to operate.

The number of globules in the tubes varied from 167 to 226, and the average weight of each globule from .068 to .083 grain. The weight of the total contents of the tubes ranged from 11.7 to 17.3 grains.

JOHN CLARK.

Monsieur L. Michaud, Professor of Chemistry, Geneva, has also analysed the quack remedies lauded by Mr. Stead in *The Daily Paper*, and his results are as follows:—

"Analyses of five phials of Mattei's Electricities obtained from Mattei's depository, June 9th, 1892:—

"The examination of the five different phials has given the following results:—

"About fifteen grammes of a colourless liquid without odour or flavour.

"Chemical composition identical with that of pure water.

"Contains deposits similar to those of stagnant water, tainted. The microscopic and physiological examination confirms the chemical analysis as well as the previous analysis made by Professor Stokes, of London, who declared the therapeutic value to be nil.

"Mr. Stokes's conclusions seem to me to be conclusive.

"Geneva,

"June 11th, 1893.

L. MICHAUD.
Cantonal Prof. of Chemistry."

The analysis referred to by Mr. Stokes is the following, published by our contemporary, *Hygiene*.

"Analytical Laboratory, Vestry Hall,
"Paddington Green, W.,
"October 21st, 1890.

"Dear Sir,—On the 2nd of October I received from you three small bottles bearing the Government patent medicine stamp, each securely sealed with a wax, unbroken seal of a castle on a rock. I have now carefully examined these chemically, physically, and microscopically, and I find as follows:—

"They were labelled 'Elettricità Bianca,' 'Elettricità Verde,' and 'Elettricità Rossa.'

"To find if they possessed any special magnetic properties, they were placed singly in thin glass tubes; these tubes were suspended by silk filaments. Under such circumstances an electrical body would point one end to the north and the other end to the south. Not one of these came to rest in such a position; neither were any of them attracted by a magnet, as a magnetic body would be. Hence they certainly are not magnetic. Other tests showed that they were not electrical.

"To delicate test-paper they were perfectly neutral. Vegetable extracts are usually either alkaline or acid; even if neutral when fresh, they speedily change.

"They have the following characters:—

	Elettricità Bianca. (White) Electricity).	Elettricità Verde. (Green) Electricity).	Elettricità Rossa. (Red) Electricity).
Colour ..	None	None	None
Odour ..	None	None	None
Taste ..	None	None	None
Polarity ..	None	None	None
Specific gravity (distilled water=1)	1.0006	1.0002	1.0002
Solid matter in 100 parts ..	0.01	0.01	0.01
Metals ..	None	None	None
Alkaloids ..	None	None	None

* By metals is meant any foreign to water, or any such as are used medicinally.

"The microscope showed an absence of any floating particles or sediments such as are usually present in vegetable extracts.

"There is but one substance which possesses all the above qualities—that is water.

"None of these fluids differ at all from water in any of their properties.—Yours faithfully,
"ALF. W. STOKES, F.C.S., F.I.C.,
"Public Analyst to Paddington, Bethnal Green, and St. Luke's; Gas Examiner to the London County Council."

The dangerous and pestilent nature of Mr. W. T. Stead's quackery is amply revealed in his cool proposal to the public to put £130,000 into his possession, with which, for aught anyone could hinder, he could leave the country, and join his quondam friend, Jabez Spencer Balfour, or use, as he has used, the advance number of the proposed *Daily Paper* for the purpose of puffing swindling nostrums, bottles of about three ounces of water, sold at 3s. 9d. per bottle, and phials of sugar, water, etc., sold at 1s. each—returning a profit to the thieves who run the swindle of over £100,000 per year, and for which the sole necessities are a water-tap, a plentiful supply of bottles, boxes, wrappers, and dups, furnished by artfully concocted lies like this culled from Mr. W. T. Stead's *Review of Reviews*. "An accident," says W. T. Stead, "opened the door to the secret of Matteism." This accident was not the bursting of a water main and the accidental filling of a few bottles with water, and labelling them cancer cures, but it came about by means of a sheep-dog. Mr. Stead's description of the role played by this dog rivals the most glowing of the irritating Mother Siegel's puffs. It has a merit peculiarly its own, and which only Mr. Stead's practiced pen could give it. When Oscar Wilde lamented the decay of the art of lying, he evidently knew nothing of W. T. Stead's effort on behalf of the quack Mattei. This ignorance of Oscar Wilde's is somewhat excusable, because he had Mr. Stead's performances in the Armstrong case as evidences of bungling lying, and perhaps might with some reason class Mr. Stead as an example of the ordinary class of vulgar, inartistic practitioners. But what Mr. Stead was in his "Maiden Tribute" days he no longer is. Our readers may judge for themselves as to the ornamentation Mr. Stead can put upon a lie to-day. "This dog," says Mr. Stead, "which was afflicted with a peculiarly loathsome species of mange used to relieve itself by hunting out and eating an herb that grew on the spurs of the Appennines. Count Mattei followed the dog, noted the herb which he selected, gathered some leaves, distilled their essence, and then tried the product on a human patient suffering from scrofula. Such excellent results were obtained, that the Count went on experimenting with herbs, until by degrees he succeeded in compounding some eight or ten medicines and five electricities, with which he treats all manner of diseases."

Here in approved Quack Siegel-Sequah fashion, Stead dramatically asks:

"What is his secret?" And thus supplies the answer:—

"It is about thirty years since that shepherd dog laid the foundation of the Mattei pharmacopoeia. The dog has long since been gathered to the shades where abode the dog of the seven

sleepers and the wolf bitch, foster-mother of the founders of old Rome. Not even the skin remains, nor has any sculptor commemorated in marble or in enduring bronze, the faithful beast which led the way to the "new medical science." Count Mattei, however, does not pretend that his concoctions of mountain herbs would in themselves cure diseases. His herbs are good no doubt, but the grand secret is the fixing in the remedy of a mysterious something which he calls the electrical principle. This he asserts is the vital principle of the Universe, and as far as I could make out is cousin-german to the astral fluid of the occultists, or the strange etheric force of Keeley."

We would like to know how much Mr. Stead was paid by the Mattei swindlers to thus write up their fraud of selling dirty water as White, Red and Green Electricities. So much for Mr. Stead and the Mattei swindle, and for Oscar Wilde's lament over the decay of the art of lying.

A few weeks ago a new Drunk Cure Company was registered, having a capital identical with that Mr. Stead asks a confiding and credulous public to entrust to him for a new journal, viz., £100,000. Curiously enough, this projected Company synchronises with Mr. Stead's eulogy of The Drunk Cure in the *Daily Chronicle*, which journal, by the way, up to the present, has not had one word to say in explanation of the aid it has given by its columns to Mr. Stead's schemes in booming the alleged drunk cure. Now, our enquiries into the Stead Drunk Cure prove one thing, and that very conclusively, to wit—that it is a vulgar imposture, projected to found a home for dipsomaniacs. Mr. Stead alleged that the patients were treated in the house of a professional man near the British Museum. Asked by the writer, and by a medical man holding an important public position, who the Bloomsbury medical man was, Mr. Stead's friend, A. J. L. Gliddon, 18, Pall Mall East, vendor of the swindling Mattei nostrums, refused to give the professional man's name. On being also asked the name of the fully qualified medical man placed in charge of the alleged drunkards, Mr. Gliddon refused the name. In reply to the question, what experiments had been made to prove that so powerful a drug might not be dangerous to a patient, Mr. Gliddon alleged that it had been analysed by a public Analyst, whose name he inadvertently mentioned, but as the Chemical Society were recently asked to consider the necessity of removing the said Analyst's name from their list of members for grave reasons, needless to say, we were not disposed to attach any importance to a laudation of the Stead Drunk Cure from that quarter. We, however, discovered that he only certified that it was free from poisons. Mr. A. J. L. Gliddon was then asked to supply a bottle for independent analysis, to satisfy the writer that it was not a dangerous drug, but refused to do so. The only conditions, therefore, upon which Mr. Stead's Drunk Cure could be tried were the following, laid down by Mr. Gliddon. A cash payment before treatment of twenty guineas—Mr. Gliddon insists that the public shall trust him as completely for the "Drunk Cure" as Mr. Stead asks them to do for his paper, without an atom of any security that the one shall get the cure or the other the paper. For this 20 guineas the patient may enter the home where the alleged remedy will be administered to him for a month. Now this opens up a nice question. Neither to ourselves nor to medical men who have asked for information, *re* the alleged "Cure," has any further information been given as to its composition, or what members of the faculty vouch for it, or saw the cases tested. Each inquirer was asked to deposit 20 guineas with a man whom we have proved to be the vendor in England of the Mattei Swindling Cancer Cures, *i.e.*, dirty water, sold at 3s. 9d. per 3 ounces, and to accept the assurances of this charlatan, and his fellow charlatan, W. T. Stead, that the alleged cure for drunkenness was a genuine remedy, and worth a payment of 20 guineas to try it without any guarantees whatever, either medical or chemical, that it was not worthless or dangerous. Now, if we suppose that 100 persons were duped by Stead's Eulogy of this new nostrum to expend twenty guineas each, we have a total sum gathered in by Mr. Gliddon of £2,100. The boarding and lodging, with attendance, of 100 such persons would not cost thirty shillings per week each, for he it noted they would be rigorously confined to the plainest diet, and be kept from alcohol of any kind, from bromides and other drugs. The cost of a month's keep of 100 such persons would not be £600, everything included, which leads us to the interesting fact that Mr. Stead's disinterested philanthropy means a profit of some £1,500 per month for the the philanthropic altruist, A. J. L. Gliddon. Mr. Gliddon alleged to the writer that over 100 cases were being treated, so this computation of the financial benefit accruing from philanthropy, cant, and pseudo-religious fervour, is by no means over-estimated. In his "Two and Two make Four"—a story in which Mr. Stead portrays himself under the character of Jasper Sterling modestly endowing his fictitious self with *tous les vertus*, Mr. Stead is made to be the coming saviour of Society, looking to Lady Sidney Vernon—a thin disguise for Lady Henry Somerset, as the Mæcenas to finance his schemes.

One of the objects of the new journal professes to be the rooting up of mean fraud. Says Sterling (Stead): "What would you be?" "Public prosecutor I think," said Dick, "under the Bankruptcy Act, or anything that would help me to punish the scoundrels who would steal and swindle under the cover of business." From *Two and Two make Four*, p. 59.

Such, Mr. Stead's professions as to the role his new paper is to play. Contrast this admixture of hypocrisy, impudence, and vanity, with the facts we have already given. We have shown this regenerator of England, this St. George, who is to purge the land of fraud, to be the lying advance agent of a gang of mean swindlers, to have deceived poor sufferers from cancer into spending 3s. 9d. for three ounces of water sold as an infallible cure for cancer, to have lied to the medical profession to save himself from exposure, to have insulted in the interests of an Italian quack swindler the profession of which Huxley, the late Sir Andrew Clark, Jonathan Hutchinson, and Sir Dyce Duckworth are but a few of the names honoured by Englishmen. We would not have stirred a finger to expose this nauseous gatherer of prurient lies, hypocrite, and associate of swindlers as he is, did we believe his repentance for his share in the Mattei swindle sincere. Had he not deliberately lied to and duped the medical world to avoid exposure, as he is now trying to dupe the public for £130,000 to enable him to carry out whatever schemes, quack or knavish, that may lurk behind his hypocritical professions of regard for the public weal, we would have left him to time, but the *raison d'être* of our journal has been the rooting out of frauds upon the public such as this drunk cure of Stead's, and we should be wanting in our duty if we kept silent, and allowed another of the Stead group of quack swindles to be firmly planted in the land.

LORD WINCHELSEA'S SPRAT.

Of panaceas for the salvation of English agriculture there are no end, and many of them are good enough in their way, and would undoubtedly go far to benefit agriculturists. But the mischief is, that they are propounded almost invariably by persons who know nothing of the subjects they discourse about. For example, the following programme of Lord Winchelsea will commend itself to the bulk of our readers—especially proposition 5, but candour compels us to say that Lord Winchelsea has never done one jot of real work to suppress adulteration, nor, has he lifted even a finger to enforce the law; that in fact he is a mere *poseur* in the question, not understanding it, and not taking the trouble to understand it. Upon this we can speak with absolute authority, as the thousands concerned with the operation of the Adulteration Acts who read our journal well know. If Lord Winchelsea and his Union mean to do anything to check adulteration, we are glad, but if they intend to merely resolute about the question for *Kudos* sake, they had better save their breaths. Enough humbug is already talked to the English agriculturist.

His lordship has formulated the following programme, and suggests that it should form the basis of the discussion at the Agricultural Conference to be held in London next month:—

1. To encourage home industries without losing the blessing of cheap food.
2. To alter the beer duty so that beer shall be brewed from English malt and hops.
3. To take off the tea duty and diminish the duty on tobacco, placing small duties on foreign flour, fruit, and vegetables instead.
4. Land to bear its fair share of public burdens and no more, the poor, education, and highway rates being paid out of the whole national income.
5. To strengthen and enforce the law against adulteration and the fraudulent sale of goods under false names.
6. More stringent regulations against the introduction of cattle disease from foreign countries and the suppression at home of other diseases than those dealt with at present.
7. Co-operation in order to bring producers and consumers closer together.
8. A labour register.
9. Any other objects that may be agreed to by the Council with the advice of the branches of the Union.

What disease does the Adulteration Act succumb to soonest? An attack of RICKETS.

The latest proposal for the utilization of separated milk is to make soap of it, they could take the whole lot and welcome as far as the honest dairyman is concerned, but it would be the death-warrant of the underseller.

At Bolton-by-Bolland Police-court, on November 6th, Margaret Altham, innkeeper, of Waddington, was fined 10s. and costs, for selling whisky diluted with water, and 44 degrees under proof, on September 7th.—George Martin Sleadin, of the Spread Eagle, Sawley, was fined 5s. and costs, for selling whisky diluted with water, and 31 degrees under proof, on September 7th.—David Speakman, grocer, Waddington, was fined 10s. and costs, for selling malt vinegar adulterated 50 per cent.—Inspector A. Randerson proved the cases.

IS CO-OPERATION HONEST?

Our contemporary, the *Daily Chronicle*, betrays a curious lack of accurate information in its comments upon the result of the Grocer's deputations' visit to Mr. Acland on Wednesday. After lecturing the deputation as if it was composed of persons airing a foolish and ridiculous grievance, the *Daily Chronicle* says of co-operators:—"Their societies are formed for purchasing wholesale in the most direct and economical manner, and profit, in the economic sense of the term, does not come into their transactions." One does not expect much sense in the ordinary daily newspaper at any time upon trade questions, but in the light of the recent exposures at the Skipton police court, the above statement of the *Daily Chronicle* proves clearly that the writer of it knows nothing about the real question: that he has in his mind the co-operation of Holyoake, Neale, Hughes, and other earnest workers for social well-being, and not the network of deception, sweating, and fraud that exists as present day co-operation, and that the *Daily Chronicle* writer knows nothing of the stupid farrago of twaddling untruths in Mr. Arnold Foster's book, which has formed the text-book of co-operative teaching in schools. The *Daily Chronicle*, as a journal, has steadily made for right, and we believe, if its writer knew the facts, he would have lectured co-operators and not the deputation who protested against public money being devoted to the dissemination of lies against retail traders. Mr. Acland did the only thing he could do. He disclaimed any responsibility for Mr. Arnold Foster's balderdash. It now rests with those controlling the schools to see that the book is no longer used. But the statement of The *Daily Chronicle* that co-operative "societies are formed for purchasing wholesale in the most direct and economical manner, and profit in the economic sense of the term does not come into their transactions," is one that demands some consideration. In its economic sense profit may not, but in its *swindling* sense profits come very largely into their transactions. For over a year we have shown how in one item alone £40,000 has been drawn from the pockets of the hard-worked operatives of Lancashire and Yorkshire for water made to stand upright, and sold to the co-operators as butter, *i.e.*, for water over and above the amount naturally present in butter, and representing 1½d. per lb. filched from the consumer. But how filched? we can imagine the common or garden economist asking, does not the co-operator receive it back in dividend? Those who know co-operation, as we know it, from practical experience, who have worked for its starveling wages, who have endured its eighty-four or more hours per week of slavery, can answer as we answer—they do not receive it back in dividend, for the reason that co-operation as practiced to-day is

one vast network of chicanery and corruption. Our own experience in recently testing prices and qualities of goods purchased at co-operative stores against those bought from individual traders has been, that co-operative stores charge in the aggregate some twenty per cent. more for goods than the ordinary traders charge, and that the percentage of adulteration practiced by co-operative stores is enormous as compared with that done by retailers, the reason being that, until we pointed out how the stores indulged in adulteration without hindrance, very few samples were taken from them under the Food and Drugs Acts. Thanks, however, to our exposures, the purging of co-operation of frauds like those we revealed has begun, and can have none but beneficial results. The reasons why although co-operative stores charge three to four shillings per one pound sterling more for their goods, and yet, although they have practiced adulteration with impunity, pay less dividends than the amount overcharged or gained by fraud, we will enter into in another article on this question.

WHOLESALE WATERING OF SPIRITS.—LICENSED VICTUALLERS PROSECUTED.

At Doncaster, on November 4th, Albert Trueman, licensed victualler, Bawtry, was summoned for having sold whisky 30 degrees under proof and gin 55 degrees under proof. He pleaded guilty to both offences, and a fine of 40s., including costs, for the whisky, and a like penalty with respect to the gin was imposed.—Rebecca Cuckson, of Bawtry, was charged with having sold whisky 36 degrees under proof, and gin to the extent of 40 degrees. Fined 40s. and 30s. respectively.—Fanny Thornhill, of Bawtry, had to pay £1 5s. 0s., including costs, for selling whisky, 29 degrees under proof.—Thomas Henry Woodcock, of Bawtry, had to pay the costs for selling gin 36 degrees under proof.—Robert Barham, of Tickhill, was charged with having sold whisky 28 degrees under proof, and gin 42 degrees under proof, and he had to pay fines of 40s. and 20s., including costs.—Edward Bailey, of Tickhill, for selling whisky 35 degrees under proof, was mulcted in 40s. including costs. The information in each case was laid by Mr. J. Wilson, of Rotherham, Inspector under the Food and Drugs Act. The defence in each case was a plea of ignorance. The Chairman said the law had been in force about 20 years, and the innkeepers ought to have known all about it. It was a serious offence, and a fine of £20 could be imposed. Addressing the defendant Trueman, the Chairman said in every gallon of whisky there was 10 per cent. of water added beyond the minimum legal strength—in every 100 gallons of whisky sold there were 10 gallons of water beyond that allowed by law. In the case of gin there was 33 per cent. excess of water, so that, in every three gallons one gallon of water was sold beyond that allowed. In Mrs. Cuckson's case, he said, on her own confession, she had been defrauding the public in this way for the past 40 years. The defendants would have to be very careful for the future.

RAWLINGS'

MINERAL WATERS.

As supplied to HER MAJESTY THE QUEEN.

Ginger Beer as Brewed the last Hundred Years,

IN STONE BOTTLES AND CASKS.

Gold Medallist for Purity and Excellence.

H. D. RAWLINGS, Limited, Nassau Street, London,

ENFORCING THE MERCHANDISE MARKS ACT.

Two cases of great importance to manufacturers and retailers were decided a fortnight ago. In both cases Fardon's Vinegar Company were the prosecutors. In common with other noted makers of high-class articles, Messrs. Fardons have suffered from the practice of the substitution of other and inferior vinegars placed in their casks and sold as their make. The following report of the second case, heard at Launceston on November 3rd, will interest our readers and put them on their guard against practices that may lead to the police-court, to loss of repute, and business:—

Wm. Cook, provision merchant, Launceston, was summoned for "unlawfully selling a certain article of goods, to wit vinegar, to which a false trade description, to wit 'Fardon's vinegar,' was falsely applied, contrary to the Merchandise Marks Act." Mr. J. H. Trehane prosecuted on behalf of Fardon and Co. (Limited), vinegar brewers, Birmingham; and Mr. G. Graham White defended. Mr. Trehane mentioned that on the previous day, John Guest was convicted at Callington Petty Sessions for selling vinegar from a cask which bore the name of Fardon, but which was not the make of that firm. That vinegar was supplied to Guest by Cook and Sons. It was prepared from molasses, and was not the pure malt vinegar brewed by Fardon and Co. Mr. White had given him notice of special defence as follows:—First, that defendant took reasonable precautions against committing the offence with which he was charged; and, secondly, that he gave the prosecutor all the information in his power with respect to the persons on whose behalf the trade mark, mark, or description was applied. He (Mr. Trehane) was also asked to produce a letter which defendant wrote to Fardon and Co. In that letter defendant thought the firm would not find any fault with them or their customer, because Mr. Cook, jun., distinctly informed the woman carrying on the business for Guest that Cook and Sons only sold Stephens' vinegar. He should be able to prove that when Inspector Harker and Mr. Northey purchased a pint for analysis, Mrs. Goldsworthy told them it was the very best vinegar, that she did not know who was the maker, but "Fardon," was burnt into the end of the cask. Defendant also said it was the first time they ever had one of Fardon's casks in their possession; but when Mr. Northey visited Cook's store he there saw another one to that over which the present action was taken. In a second letter Mr. Cook said the whole transaction took place without his knowledge, and hoped that Mr. Trehane, Mr. White, and the magistrates' clerk (Mr. C. H. Peter) would be able to settle the matter out of court. With regard to the special defence, the latter might have been urged with better force in the case of Guest; but in the present instance it was not applicable. It could not be said that defendant had taken reasonable precautions by washing off a label, at the same time leaving the name burnt into the vinegar barrel to remain. It was practically true that information had been freely afforded, but it was for the Bench to say whether that was sufficient to excuse defendant's illegal action. By placing impure and spurious vinegar in Fardon's cask Mr. Cook has clearly broken the law. Maria Goldsworthy, residing at Kelly Bray, near Callington, stated that on May 2nd she purchased a cask of vinegar from defendants. The cask had the name of Fardon burnt in it. Cross-examined: When she bought the vinegar Mr. Cook, jun., told her that the firm only kept Stephens' vinegar. She told him that she had a cask which cost her five shillings, and Mr. Cook said he would refill it. Never told anyone that it was Fardon's vinegar. Re-examined: Mr. Cook had called upon her since the summons was issued. Mrs. Walter Edward Northey, Solicitor, Plymouth, deposed to seeing Mrs. Goldsworthy on September 6th at Kelly Bray, and purchasing from her a pint of vinegar for the purpose of analysis. He also visited Mr. Cook's shop in Launceston on September 6th, and bought a pint of vinegar. Defendant said it was Stephens'. Mr. Cook allowed him to go to the wholesale stores, where he saw one barrel bearing Fardon's name. Inspector Harker corroborated the evidence of the previous witness. Mr. Alfred Ashby Fardon, residing at Leamington, and managing director of Fardon and Co., Limited, vinegar brewers, Birmingham, stated that defendant had not been supplied with vinegar by his firm for 14 or 15 years, but prior to then was a customer. Mr. White, in defence, referred to the fact that some stress had been laid upon defendant's statement that he had never before had a Fardon's cask in his possession, whilst many years ago he was a customer of the firm. That was explained by the fact that at the time mentioned Mr. Cook was not a wholesale dealer. He submitted that the evidence of his clients would entitle them to the exceptions urged in the special defence. The order taken from Mrs. Goldsworthy was the first given for vinegar, and she distinctly understood that Stephens' would be supplied. Having an empty cask, which was her own property, she naturally wished to save expense, and requested Mr. Cook, jun., to supply the vinegar in it. This Mr. Cook agreed to do without examining the cask. Before being filled Fardon's printed label was carefully washed off, and another label was placed over the name burnt in, because it was not very easy to expunge that mark. Mr. Cook, sen., knew nothing of the transaction until October 1st, and certainly would not have allowed the cask to have been used had he known the circumstances at the time. Under the circumstances he contended that the charge ought to be dismissed. William Robert Cook stated that he took an order for vinegar from Mrs. Goldsworthy in May last. He told her they did not keep Fardon's vinegar, but offered to fill a barrel she had in her possession with Stephens' vinegar. That was the first order he had received from her for vinegar. Cross-examined: Did not look at the cask. There was another of Fardon's casks in the store, but it had

never been used. Did not tell Mr. Edwards, of Callington, last Tuesday, that they had picked up all Fardon's casks. Mr. Lindon Cook deposed to having one of Fardon's labels washed off the cask. In cross-examination witness admitted that he saw the name of Fardon burnt into the end of the cask when he ordered it to be filled with vinegar. Charles Downing, storeman, believed that he tacked a label over the name of Fardon; and in cross-examination, said he could not say how an impression could have been taken of the letters if the latter were covered up. After a lengthy consideration, the Mayor said the Bench were of opinion that defendant had not the slightest intention or wish to deceive the purchaser of the vinegar. There was no doubt, however, that he allowed Stephens' vinegar to be placed in Fardon's cask, and had acted negligently. They thought the ends of justice would be met by defendant paying his own costs, and contributing £2 towards the cost of the prosecution.

This case raises questions of the gravest importance to manufacturers—viz., Why is it that the Merchandise Marks Act is not enforced? It is intolerable that manufacturers thus injured in their business must suffer the wrong, or place themselves in the invidious position of prosecuting those who injure them, at the risk of being accused of having embarked upon such prosecutions for advertisement purposes.

For example, Messrs. Guinness and Co. are almost daily the victims of the grossest breaches of the Act. Messrs. Epps and Co. have recently been compelled to prosecute a gang who forged their labels and substituted cocoa of the vilest description which was sold as their manufacture, no doubt greatly injuring their business. Some of this cocoa that came to us caused us to regard the firm's goods with grave suspicion. There are firms of foreign printers who supply labels of noted manufacturers in any quantities, in exact facsimile of the original labels, and the extent to which this class of fraud upon high-class makers of articles in great public demand is practised is very great indeed. It was to put down such frauds that, at enormous expense this country the Merchandise Marks Act was passed, and we have a Board of Trade costing £74,000 per year, whose duty it is to deal with this and other measures to protect traders from injury. What have traders got in return for this vast expenditure? Last year there were only six prosecutions under the Merchandise Marks Act, not one of which was instituted by this idle useless Board of Trade. The Right Hon. A. J. Mundella, for long service as a political hack, draws £2,000 per year, and a host of lackeys of one political imposter or another, cut up amongst them the remainder of this £74,000 per year; but as to earning their wages by doing one particle of real work to benefit English trade—well, the Railway Rates muddle and Merchandise Marks Acts are sufficient proofs of the fact that not one useful spontaneous act has emanated from this disgraced department for the benefit of English trade. This is the trader's own fault. So long as he will be content to sup political pap sugared with Liberal or Conservative humbug, so long will the political quacks who administer it laugh at him as a fool and squander his money in prolonging their useless official existences. There are parties that could well be spared for one that is most needed—a trader's party, concerned with the useful work of developing and fostering the agricultural and commercial industries of the United Kingdom.

RETAIL TRADERS AND SPURIOUS VINEGAR.

At Southampton, on November 2nd, William Hatch, 74, Grove-street, was summoned by Inspector Powell, for an alleged offence under the Food and Drugs' Act, by selling on October 6th, an article which was not of the nature, substance and quality demanded, to wit, vinegar, to which seventy per cent. of acid had been added. Mr. Keele appeared for the prosecution, on behalf of the Town Clerk. Defendant pleaded not guilty, and said he sold the vinegar as he bought it. The Inspector detailed the circumstances of the purchase, and said the vinegar was drawn from a cask. Mrs. Hatch, who served him, said she sold it as she got it. The certificate of Mr. Brierley, the Borough Analyst, was produced, and this stated that the article contained at least seventy per cent. of acid, and only thirty of vinegar, colouring matter also being present.—Witness added that he saw a card in the window bearing the words "Pure vinegar, 4d. per quart." Defendant repeated his defence, and said he had had the cask about six months, and it was not out yet. In answer to the Bench, witness said he did not see the name of any maker on the cask. It was a nine gallon cask. Defendant, in answer to the Bench, said he bought the cask of a man named Kerley, who came round with a van. He could not say if he manufactured it himself. Defendant was fined 2s. 6d. and 10s. costs.

POWNCEBY'S
PURE WINES, OLD BRANDIES
 And THOROUGHLY MATURED WHISKIES,
 Are specially adapted for Medicinal and Family Purposes.
 QUOTATIONS ON APPLICATION.

POWNCEBY & CO., 183, Oxford St., London, W.
 Free Delivery. No Agents. Terms Cash.

MEAT EXTRACT REVELATIONS.—III.

At the annual provincial meeting of the Medical Officers of Health, held at Newcastle on August 4th of this year, Dr. H. E. Armstrong, Chairman, said:—"One point occurred to him which some of them might know, and some of them might not know—there was an exceedingly valuable analytical periodical which had been on sale for some months. It was entitled, 'FOOD AND SANITATION.' That paper was drawing up a very great deal of information with regard to adulterations, of which Dr. Hill's paper was a summary. Only one subject Dr. Hill did not touch upon, the adulteration of meat extracts. 'FOOD AND SANITATION' devoted a few months ago several chapters to what were termed 'Meat Extract Revelations.' He (the Chairman) would not mention the names of the meat extracts, but several of the meat extracts which they were in the habit of giving to patients in hospitals, &c., instead of being the essence of meat, which they professed to be, contained no meat or very little meat in them; so that instead of feeding their patients with beef tea, they were starving them. The meat extract revelations were as startling almost as Dr. Hill's paper." Owing, no doubt, to these encouraging remarks, and the keen interest taken by the late Sir Andrew Clark in the points raised by the meat extract analyses, we have had so many enquiries for the numbers containing the articles that our supply has been exhausted. As we are daily receiving requests for copies, we have thought it advisable to republish the principal article with some curious analytical additions. The results disclosed by the analyses of Coleman's Wincarnis, and Valentine's Meat Juice, which were published in our issue of Jan. 28 and April 22, were so startling that they have brought us many letters from medical men and chemists, who had not thought of questioning the worth of the preparations, but had prescribed and sold them in good faith, influenced, our correspondents tell us, by the shoals of testimonials and laudatory analyses nearly always scattered broadcast with proprietary foods. To most of our correspondents the revelations as to the constituents of the hugely testimonialised Wincarnis and Valentine's Meat Juice came as a surprise, and the request for the remainder of the series have been so numerous that in deference to the wishes of our readers we give them again in this issue. It will be remembered that two analyses of Coleman's Wincarnis revealed the fact that the total nitrogen present was only 0.087 and 0.082 per cent., and that Valentine's Meat Juice contained only a total of 2.48 per cent. of gelatine, albumenoids and peptone, for which the astonishing price of 3s. for a bottle, containing about two ounces of fluid is obtained from the public. No more striking proof of the need for an official censorship being exercised over proprietary preparations could well be given, than the fact, that the market is flooded with meat extracts, patent foods, &c., nearly as valueless as those already dealt with in our columns, each of which is lauded as a complete food, and that often enough the least valuable is that most prescribed for invalids.

Such being the case, and no censorship being in existence, it is more than ever necessary in the public interest that consumers, but more especially the invalid and the convalescent, should have a means of knowing the truth about the foods most recommended, advertised, and used.

In the trial of Mrs. Maybrick for murder, it transpired that the invalid, James Maybrick, was given Valentine's Meat Juice when he could not take any solid food, and that arsenic was discovered in food preparations in the house, but notably in glycerine used by the patient. In this connection an extraordinary fact has recently come to our knowledge, brought to light by the analysis we published of Valentine's Meat Juice. Mr. Bird, head of the wholesale chemical works of Messrs. A. Bird & Sons, of Birmingham, recently informed us that a short time prior to the death of James Maybrick, a lot of glycerine was offered to his firm by a German manufacturer. As nothing is purchased for Messrs. Bird & Sons' business without being analysed by an Analyst in the employ of the firm, the sample of glycerine was sent to the laboratory, where, to Mr. Bird's surprise it was found to contain a large proportion of arsenic, and of course was rejected. It was more than a probability that a large part of the glycerine rejected by Mr. Bird was sold in Birmingham, Manchester, Liverpool and other large towns in the Midlands to chemists, who would neither have the time nor the appliances necessary to test the glycerine, and who, in fact, would not think of testing it, but would purchase it in good faith as pure. It is, to say the least, an extraordinary coincidence that a little time before James Maybrick's death, glycerine containing arsenic should have been on sale in the district, and that fact, allied to the notorious one that James Maybrick was himself a confirmed arsenic eater, may well raise a doubt as to whether, after all, there may not be something in the allegation so persistently made, that Mrs. Maybrick is a victim of a miscarriage of justice. It is, however, beyond doubt the fact, that in prescribing Valentine's Meat Juice for their patient, his physicians believed they were administering a valuable preparation, rich in nutrient and stimulant properties. From our examination of the preparation we incline rather to the belief that James Maybrick's death was just as likely the result of starvation as of poisoning, for Dr. Paul's analysis showed that the amount of arsenic discovered in the body was not sufficient to poison a child. Meat extracts, as worthless as that of Valentine's, are nevertheless being recommended and prescribed every day for the sick, and that being the case, we feel it a duty we owe to our readers to comply with their demands for a further series of Meat Extract analyses. In the present article we shall deal with four typical preparations—viz., Liebig's Extract, Brand's Essence of Beef, Bovril, and Valentine's Meat Juice, and along with the comparative analyses we shall give comparative prices, to the end that our readers may

the better judge of the actual and relative value of each preparation. The samples analysed were in all instances purchased independently for analysis from chemist's establishments in the Metropolis, and our own results have been compared with a separate series of analyses made by an Analyst of European reputation, thus excluding any possibility of error. Our own analyses gave the following results:—

	Brand's Essence of Beef. (8 ounces equals 1/3)	Liebig's Extract of Meat.	Valen- tine's Meat Juice.	Bovril for Invalids.
Quantity .. equals	2 ounces	2 ounces	2 ounces	2 ounces
Cost (Store price) .. at	9½d.	1/1½	3/-	11d.
Water	Per cent. 91.23	Per cent. 16.87	Per cent. 55.24	Per cent. 16.46
Ether Extract .. .	0.18	3.04	4.80	2.72
Albumenoids and Pep- tone with a small quantity of Gelatine (flesh formers) ..	3.79 (0.93)	9.55 (2.35)	2.48 (0.93)	23.87 (9.46)
Creatin and Meat-Ex- tractives (almost non-nutritious) ..	3.96	47.32	18.27	31.94
Mineral Matters, Salts of Flesh, Phosphates, &c.	0.4	22.54	11.13	19.48
Non-nitrogenous Ex- tractives .. .	None.	0.68	8.08	5.53
	100.00	100.00	100.00	100.00

To deal with these preparations in the order in which they present themselves in the above analyses, we have first to consider

BRAND'S ESSENCE OF BEEF.

The vendors declare this essence to consist solely of the finest meat, without the addition of water or any other substances. The preparation, it will be noted, is shown in the analysis here given to contain no less than 91.23 per cent. of water, i.e., 74.36 per cent. more water than Liebig's Extract, 74.77 per cent. more water than Bovril contains, and 35.99 per cent. more than Valentine's Meat Juice. The proportion of water naturally present in beef is from 43 per cent., found in the flank, to 60 per cent. in the round of beef. We confess, therefore, to an inability to understand how 91.23 per cent. can be present in Brand's Essence of Beef, and reconcile its presence with their statement in their price list that "the essence consists solely of the finest meat without the addition of water."

Our Consulting Analyst's opinion is that "the preparation is an exceedingly aqueous meat jelly, and that it has but 3.79 per cent. of nourishment, and 3.96 per cent. of stimulant nitrogenous matters; that as a food and stimulant it is worth very little indeed, although its extremely pleasant taste may commend it to invalids." The amount of albuminoids present on analysis proved to only amount to 1.25 per cent. Liebig's Extract of Meat contained nearly the same amount of albuminoids, viz., 1.35 per cent., being in this respect very little better than Brand's Essence of Beef, although the cost is 1s. 1½d., whilst Brand's is but 9½d. Valentine's Meat Juice contained only 0.93 per cent. of albuminoids, and cost 3s., whilst Bovril had 9.14 per cent. of albuminoids, and cost 11d. Roughly calculated, the nutritive albuminoidal value of Bovril was seven and a quarter times that of Brand's Essence of Beef, and six and three-quarter times the nutritive albuminoidal value of Liebig's Extract. Compared with Valentine's, the nutritive albuminoidal value of Bovril was, roughly speaking, ten times that of Valentine's Meat Juice. Calculated on the basis of Brand's Essence of Beef, as to albumen values, if Brand's Essence of Beef was worth 9½d., Bovril was worth 5s. 8d.; and on the albumen value of Liebig's, if Liebig's Extract of Meat was worth 1s. 1½d., Bovril was worth 8s. 2d., instead of the 11d. we paid for it. It would be interesting in the light of these facts to know on what basis the prices of proprietary food articles are fixed, for if we carry the calculation further, and take Valentine's Meat Juice as a price basis, if Valentine's Meat Juice was worth 3s., Bovril was worth 30s., instead of 11d. charged. As to the value of Brand's Essence of Beef as a food, an eminent scientist who is a Doctor of Philosophy, a Fellow of the Royal Society and of the Chemical Society, reports: "Its value as a food is very small, and it possesses but little stimulating action." Thus corroborating our own results.

The second preparation analysed is the much used

LIEBIG'S EXTRACT OF BEEF.

We referred in our last article to the startling experiments of a French scientist who disputed Justus Von Liebig's conclusions. Later experiments in this direction were also as conclusively conclusive. Extract of beef was given to some animals, and to others the detritus—from which the nutrient properties were by the Liebig process, supposed to have been entirely extracted—and present in the extract of meat. The animals fed upon the extract died sooner than those to whom the detritus alone was given. These extracts have an enormous sale, and are recommended highly for invalids, who are told "they should take beef made from this extract, as it is the purest, cheapest, and best." Upon the question of purity we have no fault whatever to find, the examination chemically and physically being in that respect

entirely satisfactory, but as to cheapness and food value our analysis in no way coincides with the assertions made in favour of the Liebig extracts of beef. In point of fact, the albuminoids are almost infinitesimal, being as we have previously shown only 1·35 per cent., the process of manufacture of extracts of this character being one that does not admit of a high proportion of albuminoids in the extract. The nutritive value is therefore very slight, the bulk of the nutritious substances found in the flesh from which the extract is prepared being converted into waste metabolites, kreatinin, etc. Liebig's Meat Extracts are therefore accurately described in the report of the Ph. D., F.R.S., and F.C.S., as being valuable only as stimulants, or as additions to a vegetable diet, but are not strictly speaking foods."

This opinion finds corroboration in that of Mr. A. H. Church, F.R.S., M.A., Oxon., who in "Food," pp. 167, says: "Such a preparation does not contain more than a very small proportion of the true nutrients of meat, but is little more than a food adjunct. Thus it is that Liebig's Extract of Meat cannot be regarded as a food, though its use as a flavourer and as a medicine is not unimportant; it also furnishes some of the minor food constituents." Where, therefore, real food is required for the invalid or the convalescent, Liebig's is not a preparation that can be recommended. It would be untrue, however, to deny that it possesses a certain amount of nutriment in the form of peptones, but the greater part of the true nutrients of the meat from which it is prepared is, by the process of manufacture, destroyed, and the bulk of the preparation is Creatin, Meat Extractives, and Water, non-nutritious and forming 64·19 per cent. of the whole. Compared with Brand's Essence of Beef, Liebig's Extract of Meat is, as has been shown, nearly identical in the value of the albuminoids, but the peptone in Liebig's Extract of Meat is 8·20 per cent., as compared with 2·54 per cent. peptone in Brand's Essence of Beef; 1·55 per cent. in Valentine's Meat Juice, and 14·73 per cent. of peptone present in Bovril. The peptone value of the four preparations give roughly the following results, taking Brand's Essence of Meat as the basis for the first calculation:—Brand's Essence, containing 2·54 per cent. of peptones, sells at 9d.; Liebig having 8·20 per cent. peptones, sells at 1s. 1d.; Bovril, containing 14·73 per cent. of peptones, costs 11d.; Valentine's Meat Juice, having 1·55 per cent., costs 3s. If Brand's therefore be worth 9d. the peptone value of Valentine's Meat Juice is less than 6d. Liebig's peptones value is 2s. 6d. and Bovril worth 4s. 5d.

The albumen value, however, is in every way the best test of a meat extract, inasmuch as the system requires a due exercise of the digestive powers, which foods rich in peptone but poor in albumen do not give; what is actually required for the purpose of being converted into flesh in the human system are the albumen and fibrin as presented in an ordinary beef steak. The results of the comparative analyses of food and monetary values we must candidly say surprised ourselves as much as we believe they will surprise our readers. We are pleased to find that none of the sample analysed contained preservatives.

Valentine's preparation, more than any other of those analysed, afforded matter for reflection. König's published analyses show year by year a gradual decline in the albuminoid value of that preparation which contains to-day 0·93 per cent. as against over 6 per cent. ten years ago, a fact full of significance, and showing the necessity for regular and searching analyses of proprietary food preparations.

By a curious coincidence, at the same period that we were analysing the foregoing preparations the subject engaged the attention of Mr. Peter Fyfe, Chief Sanitary Inspector for the City of Glasgow. Mr. Fyfe has since courteously favoured us with the results. They are interesting, as indicative of analytical variations, whether arising from error in the calculations or from variation of manufacture in the preparations themselves. Mr. Fyfe says:—

I took four samples of Meat Extract—1. Bovril (Fluid Beef); 2. Liebig's Extract of Meat; 3. Valentine's Meat Juice; and 4. Brand's Essence of Beef, and submitted them to Mr. R. R. Tatlock, F.C.S., one of the City Analysts. The following is Mr. Tatlock's report, which I give in full, as it is of wide interest:—

Report on four samples of Meat Extract received on 28th April, from Peter Fyfe, Esq., 1, Montross-street.

	PER CENT.			
	Bovril Fluid Beef.	Liebig's Co.'s Extract of Meat.	Valentine's Meat Juice.	Brand & Co.'s Essence of Beef.
Water	20·42	10·79	51·40	90·48
Ether Extract	0·56	0·08	0·04	trace
Albumen, Peptones, and Gelatine	14·67	17·60	7·66	4·83
Creatine and Nitrogenous Extractives	37·01	42·20	18·56	2·98
Non-Nitrogenous Extractives	8·00	8·59	11·96	0·47
Mineral Matter	19·34	20·74	10·38	1·24
	100·00	100·00	100·00	100·00
Total Solids	79·58	89·21	48·60	9·52
Weight of Sample	2 ozs.	2 ozs.	2½ ozs.	2½ ozs.
Ozs. of Meat from which the total sample is derived ..	24·6	27·6	17·5	4·1
Lbs. of Lean Roast Beef required to make 1lb. of Extract	12·3	13·8	7·5	1·5

Before comparing or contrasting the merits or qualities of these meat extracts, it is necessary to be quite clear as to what a meat Extract ought to be and what it can be. It ought to be as concentrated a preparation as possible of either the aqueous extract or the pure juice of meat. If it is this, and the preparation is free from fat and as palatable as possible, there is probably no room for improvement. It can thus only be substance, containing at its best, some approximation to 100 per cent. of the soluble ingredients expressible from meat, and if it is this it can hardly be anything more. In judging of the qualities of such Extracts, therefore, it is only necessary to ascertain how far they correspond to these conditions, as determined by their composition.

"There seems to be a general misunderstanding, to the effect that a given weight of Meat Extract contains, or should contain, nourishment equal to very many times its weight of meat; but this can never be the case, as no extract can possibly contain more than the soluble constituents of the beef, which are not more than one-fifteenth part of the weight of the meat itself. It seems to be overlooked that by far the greater portion of the nutritive ingredients do not, and never can, appear in the extract at all, but are disposed of for other purposes. In short, it must not be supposed that 1 oz. of Bovril, for example, contains or conveys the same amount of nourishment as 12·3 ozs. of meat, which is the quantity required to make it, because the greater proportion of the nutrient ingredients having been rejected in the process of manufacture as being more difficult of digestion.

"In making a comparison of the relative values of these samples it is only necessary to determine how far they comply with the above requirements. Bovril does this within 20 per cent., but it is but fair that allowance should be made to this extent for water necessarily present to keep the Extract in a soft state. Liebig's also complies with these conditions, and even more closely, as this Extract shows little over 10 per cent. of water, but it is an extra dry one. Valentine's, containing as it does over 50 per cent. of water, does not fulfil these conditions, so that after allowing for 20 per cent. water, it might well be 30 per cent. stronger. Brand's Extract is scarcely an Extract at all in anything else than the name, as is obvious from the fact that it contains over 90 per cent. of water, so that after allowing for 20 per cent. water, it might contain 70 per cent. more dry Extract of Beef.

"In my opinion an article like this should not be sold as Essence of Beef.

(Signed) "R. R. TATLOCK, F.R.S.E., F.H.S.C.S.,

"Public Analyst and Gas Examiner for the City of Glasgow."

The only remark I would offer, says Mr. Fyfe, on this valuable report is to emphasize the necessity, in the public interest, of taking samples of such important foods from time to time, as, unwarned and uninitiated the public are apt to be advertised into purchasing material which is neither of the 'substance, nature, not quality' THEY EXPECT."

We can by no means agree with the results given by Mr. Tatlock. For example, he found 7·66 per cent. of albumen, peptones and gelatine in Valentine's Meat Juice. Three separate analyses of this preparation, from samples purchased in different districts disclosed 5 per cent. less than Mr. Tatlock alleges. Similarly with Liebig's Extract. Repeated analyses of this preparation failed to yield more than 9·55 per cent., i.e. 8 per cent. less than shown in Mr. Tatlock's analyses. His conclusions, therefore, being based upon results which are apparently inaccurate, or obtained from exceptional samples which our analyses did not give, and which we have not seen as being obtained by any other analyses of the preparations in question, although interesting in themselves, do not render it necessary for us to at all alter our conclusions as to the relative values of the preparations here dealt with.

(To be continued.)

DEALING WITH WARRANTY GIVERS.

At West Hartlepool, on Nov. 6th, John W. Robinson & Co., wholesale provision dealers, Gateshead, were charged with giving a false warranty in writing. Mr. H. Simpson appeared for the prosecution, and Mr. H. Darling, of Newcastle, for the defence.—Mr. Simpson said that Mr. Wheat, Inspector under the Food and Drugs Act, called at Mr. Boddy's shop and purchased a ½lb. of lard, which was afterwards sent to be analysed. It was proved to be adulterated, and a resolution was passed by the Corporation to proceed against Mr. Boddy. In the meantime, Mr. Boddy had handed a warranty to Mr. Wheat which he received from Messrs. Robinson and Co. The committee's decision was withdrawn, and the firm proceeded against Mr. Simpson showed by the Analyst's certificate that the sample of lard contained 18 per cent. of beef fat.—Mr. Darling said his clients purchased the lard under a written warranty from the manufacturers. He asked the Bench to dismiss the case, and take whatever steps they thought proper against the parties by whom the adulterant had been inserted.—The Bench retired for a few minutes, and on returning the Mayor said they were of the opinion that the liability rested with the parties who gave the warranty to the retailer.—The defendants were fined £5 and costs, the costs amounting to £1 7s.

Alderman Parkinson, J.P. Ex-Mayor of Burnley, has been appointed Chairman of the Sanitary Committee of the borough.

MESSRS. BERTRAM AGAIN.

At West London Police-court, on the 8th inst., the adjourned summons came on for hearing against Mr. John Bertram, refreshment contractor, in respect of a glass of milk sold in the Earl's Court Exhibition, and which, on being analysed, was found to contain 36 parts of added water. Mr. Jones, one of the Inspectors of the Vestry, purchased a glass for twopence in the main building of the Exhibition, and on the sample being analysed it was found to contain the quantity of milk mentioned in the certificate. In answer to Mr. Lyon, for the defendant, the Inspector said he purchased other glasses of milk on the same day. The milk was analysed and found to be pure. Mr. Lyon said there was a perfect answer to the case. The defendant purchased milk under a contract, and after the last case, when he was unrepresented, and convicted by Mr. Curtis-Bennett, he had taken special precautions to have warranties with the churns. Witnesses were called to prove that the milk delivered on the day in question was pure and not tampered with. Mr. Blanco White, for the Vestry, suggested that the defendant must prove that the milk was sold in the same state as he received it. Mr. Lyon urged that the Act did not go to that extent, but only to the milk being sold in the same state. He also contended that the word "and" should be read in place of the disjunctive "or." Mr. Haden Corser relied on the evidences of the witnesses that the milk had not been tampered with, and dismissed the summons.

Which is another beautiful example of the warranty dodge, which we commend to Sir C. Cameron, M.P.

SHE KNOWS BETTER NOW.

At Westminster, on November 8th, the Westminster Vestry summoned Emma Curzon, who kept a chandler's shop at 66, Regency-street, Westminster, for selling as "shilling butter" a margarine preparation containing only a trace of butter fat. The defendant said she thought the law applied only to large shops. She kept a stock of only a few pounds at a time, and sold it out in halfpennyworths and pennyworths to poor people, who lived in courts and alleys. Mr. De Rutzen said that made it all the worse. Poor people paid dearer for their commodities than any other class, and to palm off on them cheap substitutes for what they asked for was a fraud. He fined the defendant £3 and costs.

AN IMPORTANT APPEAL CASE.

If by any fortuitous accident *The Grocer* could write accurately upon any subject it would not be so deadly a trap to traders as it has so consistently proved itself. These are its comments upon the appeal case of Bakewell v. Davis. Says our blundering contemporary:—

A farmer appealed against a conviction for selling milk "containing 22 per cent. of fat less than natural." The Public Analyst certified that there were in the milk 88 parts and a fraction of water, and that the total solids were 11.35 per cent., of which solids not fat were 8.66, and solids fat 2.69; and he stated that any milk in which the percentage of fat was less than 3 per cent. was "fraudulent," but he admitted that from the dryness of the season (this was in April last), poor feeding, or other causes, the fat in the milk from one cow might fall below that standard, and he had known a cow yield only 2.6 per cent. of fat.

Mr. Justice Charles, in giving judgment, said that the result of the Analyst's certificate was that the proportion of cream or fat in the milk was less than natural or usual. That, he added, was the proper course, and it showed that an offence against the statute had been committed. Mr. Justice Wright concurred, observing that as to the Analyst's certificate, it was only in cases of adulteration that it was necessary to enter into the proportion of ingredients as showing fraud. The appeal was accordingly dismissed and conviction upheld. Thus it seems that, although a Public Analyst may acquit a trader, summoned under this Act, of "actual adulteration," the latter may still be convicted if an article he sells fails—from causes he cannot control—to be "of the nature, substance, and quality, demanded." Here is another pretty vista opened to our readers. They may be fined for selling goods in which even the Public Analysts says there is no "actual adulteration."

Anyone who paid attention to *The Grocer's* leading articles, would believe that the appellant had been convicted for adulteration, although the milk contained 28.69 per cent. of fat. Dairy farmers, Analysts, Food and Drugs Acts' Inspectors—in fact, all who know anything of the amount of fat milk contains, will smile at the statements of *The Grocer*. The importance of the case and its interest to those concerned with the Food and Drugs Acts, lies in the fact that the various objections raised

on behalf of the appellant, were all set aside by the Court of Queen's Bench—in other words, that the appellant has been sufficiently ill-advised by his legal advisers to waste his money contesting a case from which he emerges poorer, but we hope, wiser. The main point to be noted by our readers is, that the objections raised to the form of the statement of the adulteration, which was that the milk contained "22 per cent. of fat less than natural," were brushed aside, and that form of statement held to be good.

In the Queen's Bench Division of the High Court of Justice, on November 4th, Justices Charles and Wright, sitting as a Divisional Court, resumed the hearing of the case of Bakewell v. Davis, in which the defendant appealed from a conviction by the Magistrates of Birmingham for selling poor milk. Mr. Jelf, Q.C. (with whom was Mr. Hugo Young) appeared to support the conviction. The learned counsel for the defendant had, he said, contended that the conviction was bad, first because the Analyst's certificate did not comply with the statute, and that its compliance was a condition precedent to the validity of the conviction. He submitted that the certificate did comply with the Act, but whether it did or not was not a condition precedent to the validity of the conviction. The next point was that the summons was bad for want of particulars, but that he disputed. The third point was that the Analyst had not carried out the whole of the analysis himself. Justice Charles said there was nothing in that point. Mr. Jelf cited authorities in support of his conviction. Mr. Wills, in reply, said that the Act aimed at putting down abstraction or admixture, but did not make the mere selling of poor milk any offence. Justice Charles said that the question whether the mere selling of poor milk was an offence was a point which did not arise, and the Court was not going to decide such an important point. Justice Wright said the Justices acquitted the defendant of any moral blame. Mr. Wills said that might be so, but a conviction would be a serious injury to his client. Justice Charles, in dismissing the appeal, without costs, said that the main point on which it was necessary to give their decision was with reference to the form of the certificate under the provisions of the Food and Drugs Act, 1875. The defendant was charged with an offence under Section 6. It was said the certificate was bad because it was not in the form provided by the Act. What was stated upon it was that a sample of milk was submitted to the Analyst, with the result that the Analyst was of opinion that there was 22 per cent. of fat less than natural. There was an addition that the abstraction of fat was a fraud, and might be injurious to health. Upon careful consideration it was clear that the observations were only to be made in the case where there was adulteration, and not in such a case as the present. It was objected that Dr. Hill had made an unauthorised observation which ought not to have been there; and Mr. Wills had contended that the observation invalidated the certificate, and pointed out many serious consequences if that contention were not right. The justices had entirely acquitted the defendant of knowing there was anything wrong with the milk, and therefore he was absolutely free from the blame that would attach to him under the 9th Section for abstraction of fat with the intention of selling the milk, as the fat had not been abstracted. The question, therefore, was whether the certificate was any the less valid because it contained an unauthorised addition. He did not think so. He held that the certificate was not invalidated, and that the decision must be affirmed; but he did this with regret because he felt the force of the observation as to the injustice which might be done by the insertion of an unauthorised observation of this description. Justice Wright concurred, adding that he was sure Dr. Hill had not done anything intentionally wrong, and that he hoped the attention of Analysts throughout the country would be called to the case, so that they might not insert in their reports findings of fact outside the scope of their analyses.

The Grocer keeps, so it boasts, a tame Analyst. In the kindest manner we suggest to our contemporary that he ought to be let out of his cage occasionally to prevent the Grocers' leader writer making such woeful and misleading exhibitions of ignorance. No milkman who sells milk containing 5.69 per cent. of fat need fear the Inspector, the Analyst or the Magistrate. If Mr. Bakewell has such milk he should bring it to London. We would guarantee him customers in thousands and regard him as a paragon of his class.

SOMERSET HOUSE AND LARD.

At Barnard Castle Police Court on November 8th, Mark Milner, grocer, Galgate, was charged with selling lard containing beef fat.—It was stated that Mr. Stock, the County Analyst, had certified on a previous occasion the presence of 7 per cent. of beef fat, but a one-third sample had been remitted to Somerset House, and the case was adjourned. This was the adjourned hearing, the certificate of the Government Analysts being produced. It stated that no trace of beef fat could be detected. Mr. Wright (Ayrton, Radcliffe, and Wright, solicitors), Liverpool, represented Messrs. Bancroft and Co., Limited, lard refiners, Liverpool. The Bench dismissed the case, without calling for the analysis of Dr. Campbell Brown, of Liverpool, and Mr. Wright applied for costs against Mr. Dunn, a Durham County Inspector under the Food and Drugs Act. The Bench allowed costs. Mr. Dunn said he had the authority of Mr. Simey, the Clerk of the Peace of the County, to say that Mr. Stock would proceed, when arrangements were completed, to the Government Laboratory London, and demonstrate his own methods of analysis, and that in the County Analyst had the actual extraction of beef fat in his possession, and he, Mr. Dunn, had seen it.

GUARANTEED ABSOLUTELY PURE.

Warranted to stand any Analytical test. A natural product ensuring perfect digestion not possible in the various manufactured Acetic compounds

SICILIAN WINE VINEGAR. Can be supplied in bulk.
Write for Samples and Price to Sole Proprietors:—
72, Mark Lane, London, E.C.
READ & DIGHT.

A PROSECUTION FOR DRUG ADULTERATION AT LAST.

At Ruthin, last week, Superintendent Jones summoned Howell Price, village storekeeper, Llandegla, for selling adulterated spirits of nitre.—Mr. Edward Roberts appeared for the defendant.—Thomas Morgan accompanied the prosecutor to the shop named on the 26th September, and applied for two ounces of sweet nitre, for which he paid eightpence. Superintendent Jones returned to the shop, and asked the vendor whether he would like it registered, and told him he was about to send it away for analysis. He had had the certificate from the Analyst, which showed there was but half the quantity of spirit there ought to be in it.—Mr. Roberts contended that the article applied for had been supplied by his client, and quoted from "Stone's Justices' Manual," and the question was whether they were supplied with what they asked for, and the article asked for in the case was sweet spirits of nitre. He was glad to see gentlemen on the Bench who understood the question, and he thought it was an important question to the public. There were two compounds, sweet spirits of nitre, and spirits of nitre and spirit of nitrous ether. The Clerk said the question was whether it was sold to the prejudice of the buyer. Mr. Roberts intended dealing with that. The spirits of nitre, properly so called, was a product of the old London Pharmacopoeia, and the spirits of nitrous ether was a product under the British Pharmacopoeia, and was a different compound. The Warden pointed out that if a mixture was altered, and the alteration was not brought to the knowledge of the customer, it was a fraud, and punishable. Mr. Roberts again asked the Bench to observe the distinction in the two preparations, and quoted from hand books of the old London Society and the British Pharmacopoeia showing the ingredients of the two compounds. He contended that the customer had been supplied with what was asked for in this case. The Warden said the Analyst had conducted his analysis under the British Pharmacopoeia. Mr. Roberts quoted from Stone's Manual, which said that they were not bound by the British Pharmacopoeia, and read a case which had been decided. He went on to say that the only question that could arise, was as to the quantity of nitre there was in the preparation sold, and he showed that there was a greater percentage of spirits of nitre in the compound then laid down by the British Pharmacopoeia. The Warden thought the question was more for an expert, but they had only to deal with whether the defendant had been guilty of fraud. Mr. Roberts then read a case reported in the *Chemist and Druggist*, which was similar, in many respects, and dealt with the same compound, spirits of nitre, and the case was dismissed, it being proved that there were two so-called spirits of nitre before the public. The compound in the case had been purchased from the same firm at Liverpool. The Warden: That is only a case before magistrates, and not before a Superior Court. Mr. Roberts: The Analyst was present and gave evidence. His client was perfectly in the right in selling what he had, and it was a very important question to the public. By request from Superintendent Jones, Mr. Roberts read the composition of the nitre from the British Pharmacopoeia. The only complaint that could be made was that the sweet spirits of nitre contained little or no nitre, but it was a very popular mixture. Dr. Jenkins pointed out that it was the same, only different in quality. The Magistrates retired, and on returning in about half-an-hour, the Warden said they had considered the matter very carefully, and they thought it so important in the public interest, that they would adjourn the case for the attendance of the Analyst, and further, they thought the question should be well argued on both sides, and the Inspector should have the assistance of a solicitor. Mr. Roberts said he would produce evidence against the certificate of the Analyst.

KINGZETT'S IMPROVED SULPHUR FUMIGATING CANDLES.

Kingzett's Sulphur Fumigating Candles have already been described in these columns. Our readers may remember that Mr. Kingzett's first patent consisted in the employment of a fuse moulded in the form of a cone, which was set in or on a mass of sulphur moulded in a suitably-shaped vessel. The fuse in question consisted of sulphur in admixture with chlorate or nitrate of potassium or sodium. Further investigation by Mr. Kingzett has led him to the discovery that such a fuse may be altogether dispensed with, and he now employs in its place a strip or ribbon of Brussels net, or other similar material, which is first of all coated with a thin layer of sulphur by passage through a bath of that substance in a molten state. The strips of material thus coated with pure sulphur are afterwards cut up into suitable lengths, bent into circular form, and then inserted in the molten mass of sulphur forming the body of the candle. On application of a light to the prepared strip which stands up above the surface of the body of the candle, it immediately takes fire, and burns with great rapidity, the molten sulphur running down on to the surface of the candle, and firing it immediately. Mr. Kingzett finds that many materials may be employed, such as maulin and tissue paper, but Brussels net is better than all others, because it gives very little ash, and the air spaces in the fabric, which are revealed immediately that it is ignited, serves to feed the burning sulphur with a plentiful supply of atmospheric oxygen. We understand that Mr. Kingzett's sulphur candles, in the two forms that we have now described, have been adopted for use by many of the sanitary authorities in this country for the fumigation of infected rooms and dwellings, and they may be also very usefully employed for the extermination of insect pests, besides which they are suitable for use in many particular trades. Thus, for example: by brewers, for fumigation of their vats and tuns, in order to free them from troublesome secondary ferments; while again, for example, they can be most usefully employed for the purification of slaughterhouses and butchers' store-rooms.

EXCESS WATER IN SPIRITS.

IMPORTANT POINT OF LAW.

We have always held the "Notice" re spirit dilution to be an iniquity, unfair to the publican who sells a genuine article of full legal strength, and to the consumer who pays whisky price for water. Failing the suppression of this practice by the operations of the Food and Drugs Act, it is one to which licensing Magistrates ought to direct their attention, and refuse renewals of licences to those who adopt this system of gaining what is in its essence a surreptitious profit. The following case is therefore very important:—

In the Queen's Bench Division, on Nov. 11th, before Mr. Justice Kennedy and Mr. Justice Wright, in the case of "Maris v. Askew," Mr. Greene, Q.C. (with him Mr. Newson), said that an information was laid before Magistrates sitting at Stafford against the defendant for selling rum which was said to have been adulterated, contrary to the provisions of the 6th section of the Adulteration of Food and Drugs Act of 1875. The magistrates dismissed the information. This decision was now appealed against, and the case sent up stated that on the 15th of April last Henry Toy, who acted under the Inspector, went to the house of the defendant and purchased half a pint of rum. He was told that there were two qualities, one at 1s. and one at 1s. 2d. per half pint, and Toy asked to have that at 1s. There was no label of any kind placed upon the bottle. The amount paid was the usual sum paid in the neighbourhood for rum that was not diluted beyond the statutable allowance, but the rum in question was diluted 19 per cent. beyond the statutable allowance of 25 per cent. This was not disputed, but it was said on behalf of the defendant that there was a notice conspicuously placed, which said, "All spirits sold at this establishment are diluted according to the new Excise regulations." There were, however, no new Excise regulations; but it was contended, on behalf of the defendant, that the notice was equivalent to a notice that all rum sold at that establishment was diluted below 25 per cent., the statutable allowance below proof, and that in consequence of this notice, the sale of the rum could not be said to be "to the prejudice of the purchaser," and that, therefore, no offence was proved. The appellant contended that the notice was not sufficient within the statute, and that, therefore, it did not cover any dilution beyond the 25 per cent. The Magistrates, however, were of opinion that the notice was sufficient, and therefore they dismissed the summons. The question seemed to be whether the notice was in fact sufficient; or whether, under the two sections of the Act, there was a sale of rum to the prejudice of the purchaser. Mr. Justice Wright: The defendant was acquitted, and you want a conviction? Mr. Greene: Yes; because the question was a most important one for the public. The statute said that no person should sell to the prejudice of the purchaser any article that was not of the kind intended to be purchased, and really the whole question here turned upon whether the article was sold to the prejudice of the purchaser. Mr. Justice Wright: This Court would hardly decide that point. Mr. Avory, who was for the defendant, thought that the question was not if the notice was sufficient, but whether the article sold was to the prejudice of the purchaser. Mr. Justice Kennedy: If the notice was insufficient then you were unprotected? Mr. Avory: Yes. Mr. Justice Wright: Then we cannot determine the question, and the case must go back to the Justices to be reheard. Mr. Avory said he was going to contend that the Magistrates were right in holding that the notice was sufficient. He referred their lordships to the decision in the case of "Sandys v. Small," 3 Q.B.D., and he submitted that this case came within that decision. It was contended that there was no label upon the bottle, but the Court held that the notice published was a sufficient defence without there being any label. The question here was not what would be the meaning of the notice as it would be construed by lawyers, but as it would be understood by the ordinary customers at a public-house. He submitted that they would understand from this notice only one thing—that the spirits were diluted. The magistrates here had found that it was brought to the knowledge of the purchasers that the spirits sold were diluted, although it was added that that was according to "the new Excise regulations." It was obvious that what it was intended to give notice of was, that all spirits sold there were diluted. No notice was necessary unless the rum was diluted below the statutable limit of 25 per cent. Mr. Justice Kennedy: You have got to get out of the phrase in the statute that articles should not be sold "to the prejudice of the purchaser." It might be that the purchaser put upon the notice the meaning that "the new Excise regulations" allowed him to be prejudiced. Mr. Avory: That would be inconsistent with the finding of the Magistrates that the notice was sufficient. Mr. Justice Wright thought that the case must go back to the Justices upon the question that the notice did not in itself prevent the sale being to the prejudice of the purchaser. Mr. Greene: Not that the case should be restated for the opinion of this Court, but that it should be dealt with by the Justices subject to the direction now given. Mr. Justice Wright: Yes. Mr. Greene: And they will deal with it in the ordinary way when it is before them. Will your lordships give costs? Mr. Justice Wright: The defendant had been acquitted, and there will be no costs. The case was sent back to the Magistrates for rehearing.

NOTICE TO SUBSCRIBERS.

Index to Volumes I. and II. is now ready, price 1s. Volumes I. and II., bound in cloth, gold lettered, with index complete, 7s. 6d. each, carriage paid. Postal Orders to be made payable to the Publisher, FOOD AND SANITATION, 183, Strand.

BEWARE OF SO-CALLED GUINNESS'S STOUT.

At Swansea Police-court, on November 9th, Mr. Coke Fowler gave his decision in a case heard last week against Mr. W. F. Bull, wine and spirit merchant, of Union-street, Swansea, charged with a breach of the Merchandise Marks Act by selling as Guinness's extra stout, a liquor, which, on analysis, was found to be not of the strength of the stout in question. He said it was proved that in August last and on other previous occasions Mr. Bull purchased barrels of Guinness's extra stout, and that that which he obtained in August had been bottled. Mr. Hamilton, the Bristol agent for Guinness, came to Swansea, and in last October, employed Henry Thomas to buy at Mr. Bull's shop a dozen half-pint bottles of Guinness's extra stout. These were analysed by Mr. Phillips, of Dublin, who said the specific gravity of all Guinness's stout that went out was not less than 10.78, while this, which was called "Guinness's Extra Stout," in two bottles tested was short of weight by 10 degrees of specific gravity, and that fact indicated that the contents of those bottles were not Guinness's extra stout. If the Analyst were right, as the Bench believed him to be, either the August barrel of extra stout had been tampered with in bulk, or some mixture had been used to fill the small bottles. However it was done, the Bench felt obliged to conclude, and find that when a label was attached to the bottles showing Guinness's extra stout, that trade description was not true, and the buyer did not get what the description gave him a right to obtain. It seemed to the Bench that there was nothing to rebut the evidence for the prosecution. No complaint of any indication of tampering with the barrel was made by Mr. Bull. He received and retained it, and so they fairly concluded there was none. The quantity tested was small—viz., two half-pint bottles, but each yielded exactly the same result, and the Bench might justly conclude that the scientific test applied was sufficient to prove that information, unless it were rebutted by evidence or some satisfactory answer were given. No such answer was given, and therefore they imposed a penalty of £10, including the costs. But if defendant wished to have the other ten half-pint bottles tested (assuming they were still intact), they were willing to adjourn the hearing for a fortnight for that purpose. On the application of Mr. Leyson, who appeared for the defence, the Stipendiary decided to grant the offered adjournment for a fortnight, in order that a point of law might be raised.

THE STAFFORDSHIRE COUNTY ANALYST ON VINEGAR.

In his report to the County Council, Mr. E. W. T. Jones, F.I.C., Public Analyst, says:—

Vinegar: This has received due attention again, but I have passed all except those samples submitted as malt vinegar, and six of these out of 28 I have reported against, holding the view that malt vinegar must be the product from the alcoholic and acetous fermentation of malt, or malt and grain wort, the saccharification of which has been entirely brought about by the diastase of the malt, and not by the hydrolysis of starch by sulphuric acid, which to my mind brings the product into the category of sugar or glucose vinegar.

LEAD IN CREAM OF TARTAR.

Dr. Alfred Hill, Medical Officer of Health, Birmingham, and City Analyst, says that six samples of cream of tartar purchased on July 14th this year, were found to contain traces of lead, but no action was taken under the Adulteration Acts. A curious incident was the discovery of lead in a sample of cheese analysed, to the extent of one grain per pound.

HINTS TO RETAILERS.

LIQUORICE AND GINGER ADULTERATION.

Retailers will be well advised if they use great caution in the purchases they make, at this period, of liquorice. There are very few genuine liquorices, whilst there are scores that contain large percentages of spurious admixtures. We have recently examined a number of samples purchased indiscriminately, some of which disclosed as high as 70 per cent. of adulteration. The warning given to grocers by the president of the Brighton and Hove Grocers' Association re adulterated ginger and other spices as follows, is also one that should not be lost sight of.

"The President directed attention to the enormous number of prosecutions taking place with reference to adulterated vinegar and ground ginger, especially with respect to the former. It had been stated some firms bought up old ginger, used by ginger beer manufacturers, and ground it up. It behoved them to be very careful about buying."

A prosecution for adulteration has now become a very serious matter, and many a bankrupt can date his ruin to the loss of reputation, money and business caused by being hauled before the courts for this offence. In liquorice and ginger a greater care in buying is the more necessary, because the detection of adulteration is impossible save by a trained scientific expert. At the recent Bakers' and Confectioners' Exhibition, numerous exhibits of so-called liquorice were made, but as showing the extent of this adulteration there were only one or two that would really pass muster as genuine liquorices. We would counsel grocers to buy neither liquorice nor spices without a guarantee as to genuineness, and then should a prosecution take place they should sue the wholesale dealer for damages. To those in doubt, we recommend the Solazzi liquorice as a genuine one, and those vending it need fear no risk of prosecution for adulteration. In gingers buy none from firms who quote ground ginger at a less price than whole ginger. That is a sure sign that their ground ginger is a fraudulent article and dangerous to the grocer who sells it.

THE INFLUENCE OF FOOD ADULTERATION UPON HEALTH.

By Dr. Alfred Hill, Medical Officer of Health and Public Analyst, Birmingham.

(Continued from page 323.)

Coffee, when pure, is a most valuable ingredient of our food, owing to its agreeable flavour and odour, and its refreshing and gently stimulating properties. If not absolutely necessary, it is a most desirable constituent of our daily dietary, and anyone that deprives it of its qualities, by substitution or otherwise, inflicts an injury more or less grave on health. Yet, perhaps, no substance is more adulterated; but because the adulterants are not poisonous, not directly but only indirectly injurious, the offence is thought little of, and but lightly punished, with the result that the profitable practice of its adulteration is rather encouraged than repressed. Passing over dates, beans, burnt sugar, &c., the most common adulterant is chicory, which contains neither caffeine nor essential oil like coffee: it is neither exhilarating nor pleasant in taste, while on some persons it acts as an irritant and purgative. Some so-called coffees contain quantities of it to the extent of even 95 per cent., and, provided the mixture is called "French coffee," or "a mixture of coffee and chicory," there are magistrates who would not convict for the offence. It would be more correct to call such a mixture adulterated chicory, rather than adulterated coffee, which term it seems entitled to only by courtesy.

Chicory, however, is in its turn very subject to adulteration in many forms, two very common adulterants being beetroot and mangel wurzel. Only last month a number of tradesmen in London were fined for this offence. It is hardly to be wondered at that the consumption of coffee in England is declining.

In considering the evils of coffee adulteration we must not forget that coffee is not only a beverage but a drug. It is found to be of value as antagonistic in action to the alkaloid morphia, as well as to another alkaloid, so that in cases of poisoning its adulteration may lead to the failure of medical treatment even to the extent of loss of life.

Wine, "that maketh glad the heart of man," "the milk of old age," too frequently is subject to adulteration, which in some cases robs it of its advantages as a dietetic substance and a medicine, and in others renders it positively injurious. One of the commonest forms of adulteration is the addition of sulphate of lime, which in one respect resembles in its effect the action of alum on flour—that is, it makes inferior wines look of better quality. It is said also to promote fermentation, and to give a brighter and more permanent colour, and to enable the wine to "keep" longer. Its action upon the tartar of the wine (bitartrate of potash) results in the precipitation of the tartaric acid, a valuable constituent, in combination with lime, while the potash unites with the sulphuric acid, which remains in solution as sulphate of potash. The quantity of this latter salt is said to be increased five to ten-fold, some sulphate of magnesia is formed, and a portion of the sulphuric acid is said to exist in the free state. The influence of plastering has been inquired into in the wine district of Aveyron, and it is described as producing an unquenchable thirst, and an insupportable dryness of the throat. On this subject, as on many similar ones, there are differences of opinion, though competent observers generally agree that such sophisticated wines are injurious. M. Marty, in making a report on the subject, says, "it is an incontestable fact that plastered wines occasion functional troubles and organic injuries; they act as purgatives and caustics in certain cases." Where plastering is permitted, it should be so limited that the proportion of acid sulphate of potash should not exceed two grammes per litre. It appears quite reasonable to suppose that the replacement of the natural organic salt of potash containing tartaric acid by the corresponding inorganic salt containing sulphuric acid should produce very different physiological effects and be calculated to do injury. As a result of the investigation, the Academy of Medicine was unanimously of opinion that the plastering of wine is detrimental to health, and advises that the laws against it be rigorously enforced. There are other objectionable adulterations of wine, but upon these time forbids me to enter.

Beer is at present a very indefinite compound; it was formerly made from malt and hops only, now it can legally be made from starch and sugar and vegetable bitters of various kinds, probably as harmless as the hop if not as agreeable; but the same remark does not apply to beer which has been treated with a view to cure its sourness and other defects, or which is dosed with preservatives or antiseptics. This question of the common use of

Preservatives and Colouring Agents in food and drink is one which possesses considerable importance in relation to health. The number of such substances is very considerable, they are mixed with a great number of articles of food of daily consumption, and consequently the quantity used is enormous. The following are the principal antiseptics and preservatives employed: Borax and boracic acid, alone or mixed, for milk, cream, butter, bacon, sausages, and fish; salicylic acid in wine, beer, and other beverages, and preserved fruit; benzoic acid, to replace salicylic, the use of which in France was prohibited by law; sulphurous acid, sulphites, and bisulphite of lime in beer, lime-juice, and meat; sulphate of lime for wines; alum for flour and bread; sulphate of copper in green vegetables and fruits; sulphuric acid in vinegar and lime-juice;

(To be continued.)

THE LOCAL GOVERNMENT BOARD'S TWENTY-SECOND ANNUAL REPORT AND THE FOOD AND DRUGS ACT.

This report, issued last week, says:—The number of cases in which we have approved of the appointments of Analysts under the Statutes 35 & 36 Vict. c. 74, and 38 & 39 Vict. c. 63, is as follows:—

Administrative Counties	61
County Boroughs in which appointments have been made under sec. 10 of the latter Act	60
County Boroughs in which arrangements exist under sec. 11 of the latter Act	3
Non-county Boroughs, with a population of over 10,000, under sec. 10 of the Act	67
Non-county Boroughs, with a population of over 10,000, under sec. 11 of the Act	4
The Commissioners of Sewers of the City of London..	1
Vestries and District Boards of Works in the County of London	40
Total	236

The result of the analyses made during the year is shown in the abstract printed in the Appendix (p. 484). It will be seen that the total number is 32,447 or one to every 894 of the population, this proportion being considerably larger than hitherto. In London one sample was obtained for every 573 persons, in the provinces one for every 988, but the degree in which the Acts were utilised was by no means uniform in different districts. Within the jurisdiction of 26 County Councils, extending over an aggregate population of 4,271,190, only 765 samples were analysed, or one for every 5,583 persons; and in 50 boroughs and one metropolitan district, with an aggregate population of 1,799,748, only 289 samples were analysed, or one for every 6,228 persons. In all these districts there is in effect no check upon adulteration, because the Local Authorities charged with the administration of the Sale of Food and Drugs Acts neglect to exercise their powers. Specially conspicuous among such authorities, on account of the largeness of the population of their districts, are the County Councils of East and West Suffolk (population 295,461), Cambridgeshire (population 88,097), Herefordshire (population 95,719), Carmarthenshire (population 120,236), and Montgomery (population 58,003), and the Town Councils of Bury (population 57,206), Tynemouth (population 46,267), Southport (population 43,026), Scarborough (population 38,778), and Dover (population 33,418), in which, with the single exception of 24 samples obtained by the Urban Sanitary Authority of Lowestoft, not a single article was submitted for analysis by any Local Inspector. In a good many counties and boroughs, besides those already mentioned, the number of samples taken was quite insignificant. Thus, if we except the boroughs having separate Analysts, the County of Cornwall (population 299,000) supplied only 39 samples; Herts (population 207,230) only 41; Norfolk (population 247,927), only 44; Northumberland (population 260,106), only 55; Salop (population 193,654) only 37; Wiltshire (population 248,939) only 53; Carnarvonshire (population 118,225) only 5; and Merionethshire (population 49,204) only 4. In many large boroughs too, such as Devonport, Sunderland, South Shields, Preston, Ashton-under-Lyne, Burnley, Great Grimsby, Northampton, Ipswich, and Dudley, no serious attempt was made to enforce the Acts.

The statutory reports which we receive from the authorities are copies of those made to them by the Analysts, and show only the number and description of samples analysed, with the results of the examinations, without including any particulars of prosecutions. Indeed, a large number of samples are classed as adulterated although the amount of adulteration may be so small that it would be inexpedient to take the cases into Court. We have, therefore, thought it well to ascertain, as regards the samples reported against, in how many instances proceedings were actually instituted, and what penalties were inflicted; and our request for information on this head has been generally complied with by the authorities. It appears that while 4,009 samples were classed as adulterated, prosecutions were instituted in respect of 2,537, and fines were imposed amounting in the aggregate to £3,842, in most instances excluding costs. The average penalty was thus £1 16s. 2d., as against £1 11s. 3d. in 1891, and £1 9s. 0d. in 1890. There was one fine of £30 (proceedings having been taken under the Margarine as well as the Sale of Food and Drugs Act) 10 of £20 each, 7 between £10 and £20, 36 of £10, 15 between £5 and £10, and 181 of £5. On the other hand, 121 fines of half-a-crown or less, 211 were over half-a-crown and not over five shillings, and 364 were between five and ten shillings. It is frequently represented to us that the general reluctance of magistrates to impose substantial penalties for the sale of adulterated articles is fatal to the effectual repression of a practice

which is so simple and at the same time so profitable as, for example, the addition of water to milk, or of chicory to coffee. In many cases, however, the leniency of the Justices is probably due to their belief that the particular retailer who is summoned, is less culpable than the wholesale dealer who has been the actual adulterator, but who generally escapes scot-free.

The following table shows the number of samples examined during the year, and the per-centage of cases in which adulteration was reported.

	No. of Samples in 1892.		Per-centage adulterated in	
	Examined.	Adulterated.	1892.	1891.
Milk	18,633	1,818	13.3	13.4
Bread	804	3	0.4	1.0
Flour	395	0	0.0	0.2
Butter	4,713	725	15.3	15.5
Coffee	1,711	258	15.1	17.0
Sugar	297	11	4.1	4.7
Mustard	666	65	9.8	8.7
Confectionery & Jam	314	2	0.6	2.7
Pepper	1,499	27	1.8	2.8
Tea	433	0	0.0	0.0
Lard	1,145	17	1.5	2.8
Wine	46	2	4.3	3.9
Beer	477	80	16.8	4.1
Spirits	3,753	703	18.7	19.1
Drugs	702	141	20.1	16.4
Other Articles	1,869	157	8.4	9.2
Total	32,447	4,009	12.4	12.2

It will be observed from this table that the proportion of adulterated samples is rather more than 12 per cent. of those examined. This proportion is about the same as in 1891, but is rather above the average of late years. In the first five years for which the Analysts' returns were tabulated, viz. 1877-81, the per-centage of adulterated samples was 16.2; in the five years 1882-86 it was 13.9, and in the five years 1887-91 it was 11.7.

Rather less than half of the entire number of samples analysed were of milk, the per-centage reported as adulterated being 13.3, as compared with 21.1 in 1877-81, 16.7 in 1882-86, and 13.2 in 1891-92. It is to be inferred from these figures that the effect of the Sale of Food and Drugs Acts has been to secure substantial improvement in the quality of milk, but it will be observed that even now more than one-eighth of the samples analysed are reported as adulterated, and this result is scarcely a subject for satisfaction. No doubt the chief obstacle in the way of further progress in this matter is to be found in the fact that in the present state of science, analysis fails to distinguish between the water which is a natural constituent of all milk and that which has been added by the dairyman, and, therefore, an Analyst hesitates to condemn a sample of exceedingly poor milk, because it may possibly be the genuine product of an old and ill-fed cow, although it has much more probably received an addition of water. He appreciates the fact that the Acts are intended to prevent the sale not of articles of poor quality but of those which have been fraudulently tampered with; and it would not be in accordance with their design that a poor man should be subjected to penal proceedings because his cow does not produce as good milk as the better bred and better fed herd of his richer neighbours. It is the border cases which create the main difficulty, and the fact that Analysts are by no means agreed as to inferences to be drawn in such cases inevitably leads to the occasional collapse of prosecutions. Mr. Hehner, the Public Analyst for Derbyshire, observes as follows on this subject:—

"Owing to the natural variation in the composition of milk the Public Analyst is bound to pass as genuine all milks which are at least equal in composition to the poorest genuine milk yet found, although in the great majority of cases thus passed he has to do with milks artificially and not naturally weak."

In different districts the differences of the results obtained in this matter of milk adulteration are very conspicuous. In London, taken as a whole, the percentage of samples of milk reported against by the Analysts was 22, but it varied from 50 in the Strand district and 42 in St. Pancras, to 5 in St. Giles's and 0 in St. James's, Westminster. Even in adjacent districts, doubtless served in part by the same dairymen, the contrasts were often marked, and are not easily explicable. It is difficult to believe that the real amount of adulteration of milk in the districts of the Strand and of the St. Giles's

(To be continued)

TRY **H. C. JANSEN'S**
DOUBLE SWAN YEAST.

SCHIEDAM, HOLLAND.

DIPLOMA OF HONOUR (HIGHEST AWARD)
INTERNATIONAL BAKERY EXHIBITION, AMSTERDAM, 1886.

It is the strongest and most
reliable Yeast in the market,
and **GUARANTEED FREE**
FROM any mixture whatever.

MEDAL OF HONOUR | HIGHEST AWARD EVER GIVEN
DIPLOMA OF HONOUR | FOR YEAST.
INTERNATIONAL BAKERY EXHIBITION, GHEENT, BELGIUM, 1893.

REPORTS AND ANALYSES.

DR. C. L. COULTER'S VAPORIZER & INHALER.

The Coulter Vaporizer Manufacturing Company, of 22, Charing Cross, London, are introducing what appears to us to be a valuable form of apparatus for volatilising drugs and oils for inhalation, and which can also be used to give off disinfectant vapours for deodorising and disinfecting sick rooms, hospitals, public buildings, railway carriages, &c. It is used, we understand, in the hospitals of the United States army by order of the Surgeon-General. The Vaporizer is substantially made of copper and brass, nickel-plated. A small boiler is heated from below by a protected spirit lamp, as in the steam sprays familiar to many of our readers, but differs from them in that from the dome of the boiler a tube 18 inches long is carried and fitted with a mouthpiece for convenience of inhalation. Eight inches along the tube is a chamber containing a sponge, which may be impregnated with the required medicament. For disinfecting and deodorising purposes, the long, bent tube is exchanged for a short, wide, upright one, containing a sponge, which may be charged with a perfume, or with some disinfectant. The use of a disinfectant combined with steam greatly enhances its power and value, and we consider Dr. Coulter's apparatus would be of the greatest service in the treatment of diphtheria, whooping cough, influenza, and other diseases depending upon aerial contagion.

The apparatus is simple, durable, convenient of manipulation, and has the additional merit of being considerably cheaper than other vaporizers in the market.

Our analysis shows:—

HORSFORD'S ACID PHOSPHATE.

Total Phosphoric acid	5.69 per cent.
Free ditto	3.05 "
Lime	1.39 "
Magnesia	0.24 "
Oxide of Iron	0.03 "

The fluid also contains some potash.

The maker's statement in respect of this preparation is as follows:—

"FORMULA.—Analysis shows that each fluid drachm contains, 5.1-2 grains free phosphoric acid (P O³) and nearly 4 grains phosphate of lime, potash, magnesia, and iron. (*See U. S. Dispensatory, 15th Edition*).

"The therapeutical value of phosphorus is universally acknowledged by the medical profession in all countries. This substance in the form of phosphoric acid, and generally combined with lime, iron, potash, and other bases, is present in the tissues and bones, and in some form this remarkable acid is a constituent of all the important organs and secretions of the animal body.

"Among the numerous forms of phosphorus in combination, Horsford's Acid Phosphate is offered as best adapted for use as a medicinal remedy.

"It should not be confounded with the dilute phosphoric acid of the pharmacopœia, or with any kindred preparation compounded in the laboratory. Dilute phosphoric acid is simply phosphoric acid

and water, without any base, while in Horsford's Acid Phosphate a portion of the phosphoric acid is combined with lime, iron, potash, etc.

"It is not made by compounding these ingredients in the laboratory, but is a product obtained in the form in which it exists in the animal system. Many attempts have been made in the laboratory to imitate the action of nature, by combining the ingredients as shown by the analysis, but the resulting compounds have always failed in their action on the human system.

"Every precaution is taken to furnish a pure product, free from all impurities. It contains no meta- or pyro-phosphoric acid whatever.

"We do not prepare combinations of this product, but give such information as to its composition as will enable the intelligent physician or chemist to prepare such combinations as may be required.

"Experience has proved that the Acid Phosphate is especially serviceable in Dyspepsia, Indigestion, Mental and Physical Exhaustion, Insomnia, Nervousness, etc., as a Drink in Fevers, and as a menstruum for the administration of such alkaloids as strychnina, morphina, quina, and other organic bases which are usually exhibited in acid combination.

"It acts as a nutriment to the cerebral and nervous systems, restoring to their normal condition secretory organs that have been deranged, giving vigour where there has been debility, and renewed strength where there has been exhaustion.

"It is a superior substitute for lemons, lime juice, etc., in the preparation of Acid Drinks. A delicious and nutritious beverage can be made by adding a teaspoonful to a bottle of lemonade, or a glass of hot or cold water, or tea without milk and sweetening to the taste.

"It may be used with such stimulants as may be desired, as it will harmonize therewith.

"Unlike nearly all other forms of phosphorus in combination, such as dilute phosphoric acid, glacial phosphoric acid, neutral phosphate of lime, hypo-phosphites, etc., the phosphates in this product are in solution and readily assimilable by the system, and it not only causes no trouble with the digestive organs, but promotes in a marked degree their healthful action. In fact, it acts as a specific in certain forms of dyspepsia.

"Hypo-phosphites are undoubtedly converted into phosphates before they can be assimilated, by combining with the oxygen of the blood which may be needed for other purposes, while the Acid Phosphate is assimilated without robbing the blood of any of its oxygen.

"Physicians having had long experience with its use, have noticed that while the prolonged use of neutral phosphate of lime, or the hypophosphites, is apt to cause phosphatic sediment in the urine, and predisposes to calculous affections, the Acid Phosphate is open to no such objection, as the excess of phosphoric acid therein carries off any excess of the phosphates by rendering them soluble.

"Horsford's Acid Phosphate has been in use by the medical fraternity for several years, with the most satisfactory results."

The analysis shows the preparation to be reliable, and well devised, and one worthy the attention of the faculty.

IMPORTANT TO GROCERS & BAKERS.

If you wish to AVOID loss of money, repute and trade, caused by PROSECUTIONS for ADULTERATION, SELL ONLY YEAST manufactured by the following Firms:

C. A. BEUKERS.
W. A. BEUKERS.
P. BOEZEMEIJER & CO.
A. DAALMEIJER.
J. H. VAN GENT.
HAMER & CO.
HOEK & CO.
J. HOUTMAN.
JANSEN & CO.

H. C. JANSSEN.
JANSSEN & TAK.
VAN KAN & CO.
M. KRANEN.
P. J. LAGERWEIJ.
P. J. MEIJER.
THS. CS. MELCHERS.
NIEDELD & CO.
P. SCHILTMAN.

J. J. TONINO.
J. VAN DER VALK & CO.
JAN VRIJLAND.
VRIJLAND VAN DEN HOOGEN & CO.
WALRAVEN BEUKERS & CO.
B. A. J. WITTKAMP.
J. WITKAMP & CO.
P. J. WOUTERLOOD.

The above Firms are Members of the

YEAST UNION, SCHIEDAM,

And guarantee their Yeast absolutely pure and free from any adulteration whatever.

Every Package bears



their Trade Mark.

Every shipment to England is Analysed, and any Member of the Yeast Union, Schiedam, guilty of adulterating Yeast would be fined heavy penalties.

NOTE: Yeast Union (Schiedam) Yeast is guaranteed free from Adulteration. Resist all inducements to deal in any other Yeast.

WHEAT PHOSPHATES Nourish Brain and Frame, Form Bone, Teeth and Muscle, and Enrich the Blood.



is the only Food which contains the

WHEAT PHOSPHATES extracted from Wheat Bran, and is therefore the most NOURISHING food in the WORLD.

For **INFANTS**: Developing Bones, Muscles, Teeth, Brain;

For **INVALIDS**: Restorative and Invigorating; retained by the weakest stomach when all other food is refused.

For **ADULTS**: A Delicious Breakfast and Supper Dish; Vitalises the brain and all the functions of the body.

$\frac{1}{2}$ -lb. Sample in **HANDSOME ENAMELLED Box** sent free on receipt of 8d. to cover postage (mention this Paper)

Sold by Grocers, Chemists, &c., in tins, 1 lb. at 1s., 4 lbs. at 8s. 9d., or sent carriage paid by

FRAME FOOD CO., LTD., LOMBARD ROAD, BATTERSEA, LONDON, S.W.

THE PUREST OF ALL SCOTCH WHISKIES.

D. LENNOX & SONS

LONDON OFFICE:

41, PALL MALL,
S.W.

Bonded and

Bottling Stores

DUMFRIES,
N.B.



36/-

42/- 48/-

PER DOZEN CASH.

Delivered within London
Carting Circuit, or Carriage
Paid to nearest Railway Station
in Great Britain.

Do not drink Blends of Malt Grain
and Potato Spirit.

Medical Men and Connoisseurs will find this the
perfection of an absolutely pure & wholesome spirit.

**PURE
YEAST**



**PURE
YEAST**

Use 4 ozs. to 280 lbs. Flour, second turn in winter.

For doughing direct, and other methods of working, address—

W. HEPWORTH, Harwich, Essex.

Most powerful Yeast known.

SUPERIOR FLAVOUR. LONGEST KEEPING.

Highest Awards, Healtheries, London, 1884.

LONDON, 1893 (this Year).

LARGEST YEAST WORKS IN THE WORLD.

Chafed Skin, Piles, Sores, Chilblains, Chapped Hands, Neuralgia, and Rheumatic Pains, Sore Eyes, Ear-ache, Cuts, Sunburn, Insect Bites or Stings, Throat Colds, and Skin Ailments quickly relieved by use of

CALVERT'S CARBOLIC OINTMENT,
Large Pots, 13d. each, with full Instructions.

Court Circular says: "We cannot too highly recommend Calvert's Ointment. It is the best general Ointment with which we are familiar, and ought to be a stock remedy in every household."

Private report from Limassol Cyprus: "I have never found anything to come up to it for neuralgia and 'Rheumatic Pains.'"

Samples sent Free by Post on receipt of value.

F. C. CALVERT & CO, MANCHESTER.

Awarded 60 Gold and Silver Medals and Diplomas.

Food and Sanitation.

SATURDAY, NOVEMBER 18, 1893.

DISEASE AND DISINFECTANTS.—V.

In previous articles we showed the ease with which spurious disinfectants are disposed of to vestries, town councils, local boards, &c., and to the general public. The terrible results attending the taking of disinfectants upon trust—relying solely upon makers' professions, or upon experiments which, whatever were the intentions of the scientists who made them, or the results obtained, are often so garbled and dressed up for circulation to sanitary authorities that those responsible for the original analyses and experiments often have the greatest difficulty in recognising what are called "their own statements and testimonials"—we have amply shown in our previous articles. Our readers will remember the South Wingfield case, where the use of a spurious carbolic caused fifty outbreaks of typhoid fever and five deaths. Since then we have had, as a result of our efforts in directing public attention to this question, the spectacle of a few public bodies—far too few—causing their disinfectants to be analysed. One authority, which had apparently never previously taken this very necessary step for the public welfare, was the Holborn Board of Works. They recently had their supplies of carbolic analysed only to discover what they might have discovered at any period for years past, that the ratepayers were paying for a ten or fifteen per cent. carbolic, and being supplied with a two to three per cent. article. Upon such a discovery being made it might be supposed that the Board would prosecute the vendors for fraud! Nothing of the sort, however, occurs; the vendor is merely requested to take the spurious article back and supply a genuine one in its place. No Board of Works, in our opinion, can be regarded as properly performing its duty to the public by condoning an offence of this nature. The offence is one of the most dangerous that can be committed against society, because the use of a worthless disinfectant may be the cause of disease spreading, as in the case recorded at South Wingfield, and bring sickness, misery, and death to those living under such maladministration. Now that the cholera scare has subsided, for this year at least, many sanitary authorities, who during the late trying period were very hardworked, have a breathing space. They could not occupy it better than in thinking about defective joints in our sanitary armour. From our own observations we are sure that if local authorities everywhere would cause the disinfectants they are at present using to be independently analysed, they would find the results very little better than those obtained at Holborn. Only recently we came across a case, wherein a contractor of supposedly high repute, was supplying an important public body with a disinfectant, which the purchasers believed was a 15 per cent. carbolic. The actual percentage of carbolic was, on analysis, discovered to be only about 5 per cent. It contained some sulphurous acid, and had been sold to the local authority for years as a 15 per cent. powder. As we have stated, the purchasers were always of opinion that it was a 15 per cent. carbolic powder, but on examining price lists and invoices they discovered it had been originally purchased as 15 per cent. available acids, being carbolic and sulphurous acids combined. The original purchase and the reasons for it were forgotten, and for years it was ordered under the full belief that it was a 15 per cent. carbolic powder until changes in the sanitary department led to enquiry into its composition. The necessity for regular analyses of all disinfectants purchased, is one, therefore, that will be apparent to our readers who are engaged in sanitary work. It does not do to trust to testimonials and reports, however eminent be the names they bear, because, as we have pointed out, such reports are too often used by manufacturers for purposes obviously not intended by their authors. For example, we have before us a report by Dr. E. Klein, F.R.S., on "Izal," a new disinfectant. Its makers allege it to be non-poisonous, as per the following:—

"Bacteriological Report on 'Izal,' the new non-poisonous disinfectant, as prepared for medical and surgical uses, by

E. Klein, M.D., F.R.S., lecturer on General Anatomy and Physiology at the Medical School of St. Bartholomew's Hospital, London."

Now "Izal" may be, or may not be, an excellent disinfectant, but there is no warranty for calling it non-poisonous and using Dr. Klein's report as substantiating such an assertion. The slender basis of fact upon which this colossal assertion of *non-poisonous* is based, is, so far as Dr. Klein's report is concerned, the following, "In this last series of experiments," says Dr. Klein, "it was attempted to ascertain whether the disinfectant, inoculated subcutaneously into the tissues or introduced into the stomach of rabbits produced any bad results. For this purpose four rabbits, each weighing a little over 2lbs.—1,268, 1,290, 1,165 and 1,142 grammes—were experimented with.

Two rabbits received each into the subcutaneous tissue of the groin 0.25 c.c. of the disinfecting mixture of the strength of 1 in 100. The animal remained perfectly well, no tumour appeared at the seat of the inoculation; the animals remained lively and ate well.

Two rabbits received each per o.s. 0.25 c.c. of the same disinfectant mixture. The animals remained perfectly well, and they took their food in the normal manner.

"From these experiments," says Dr. Klein, "it appears that the disinfectant has no detrimental effect of any kind upon the animal, either when introduced by injection directly into the tissue, or when administered by the stomach."

It is important that our readers should consider what it is that Dr. Klein really says, and what the above experiments prove. What he says is, that a *quarter per cent.* of the disinfectant of the strength of 1 in 100 had no detrimental effect. With all respect to Dr. Klein, we think he would find it difficult to discover any person foolish enough to believe such a dilution could have a detrimental effect, and we see nothing astonishing in the animals remaining lively and eating well, for the reason that so exceedingly weak a solution would be more like ordinary water than a poisonous disinfectant. The strongest carbolic in a similar strength, *i.e.*, one part of carbolic to 99 parts of water, and then used in the proportion of 0.25 c.c., would be, we venture to assert, harmless, but such experiments however interesting in themselves, would not justify carbolic being called *non-poisonous* any more than they justify "Izal" in being alleged to be *non-poisonous*. We instance this as showing how necessary it is that the public, as well as Sanitary authorities, should inquire carefully into exactly what reports and testimonials prove, and not take them on trust from manufacturers.

[TO BE CONTINUED.]

SPIRIT ADULTERATION.

In 1890 a Committee of the House of Commons discovered that during that year there was sold as whisky 21,828,284 gallons of liquid that was not whisky at all; 12,500,000 gallons of a concoction was sold as rum or gin, and was neither the one nor the other; and 6,000,000 gallons of a decoction was sold under the name of brandy when it was nothing of the kind. The only difference between light and dark brandy in many houses is the application of burnt sugar.

TRYING TO REACH THE SWINDLING BREWER.

Our contemporary, *The Middlesboro' Daily Gazette*, says:—"Adulteration of beer and spirits, in the opinion of the Bishop of Durham, lies at the root of the brutality which makes drunkenness so hideous. Yet publicans and brewers are allowed an enormous latitude in this respect compared with respectable hard-working tradespeople. Who cannot testify to the fact that beer, which is no more good ale than cheese is chalk, is vended to whoever cares to pay three half-pence or twopence for a gill? And yet the actual cost of producing a glass of much of the beer now sold amounts to one solitary farthing. In some places the "refining process" of whisky, and even rum, is carried to such an extent that men might just as beneficially drink diluted paraffin oil as imbibe so wretched a concoction, which, by the way, is sold to them at the rate of 8s. 6d. a bottle. Publicans are seldom seen in the bankruptcy court. Though 'they toil not, neither do they spin,' they yet wax fat and 'kick against the pricks' of progress and enlightenment."

REPORTS AND ANALYSES.

PILSENER LAGER BEER:

O. Bruster and Co., 143A, Holborn, London, E.C.

The character of the lager beers commonly sold in England has hitherto been very objectionable; the beers with scarce an exception being dosed with chemical preservatives. It is true that at present the addition of preservatives to foods or drink is not regarded as an adulteration in England, but medical opinion is rapidly forming in opposition to the universal addition of powerful drugs to articles intended for human consumption, and there is little doubt that the use of boric salicylic and like substances in articles for human consumption, will be prohibited in England as they are in other countries. The Pilsener Lager Beer of Messrs. O. Bruster is, we are pleased to see, guaranteed free from any chemicals whatever, and brewed from malt and hops only—it is a pity that we have no English beers similarly guaranteed. The samples we have examined, bear out the maker's statement. They are pure, sparkling, bright, and pleasant to the taste.

WHAT IS MALT VINEGAR?

IMPORTANT CASE AT HEXHAM.

At Hexham Petty Sessions, on November 6th, Mr. Ed. Heslop, grocer, Corbridge, was summoned by Supt. Harkes for alleged adulteration of malt vinegar.—Mr. Alderson, Morpeth, prosecuted on behalf of the police; Mr. Newlands, of Newcastle, appeared for defendant. Supt. Harkes stated that he visited the defendant's shop at Corbridge on the 11th of August, and asked for a pint of malt vinegar. He got a pint bottle and paid 5d. for it. When he first went he asked Mr. Heslop if he had any malt vinegar in bulk, and he told him he had some. He then asked Mr. Heslop if he would guarantee it, and he said he would not. He saw the bottles of vinegar when produced, and he purchased one. Mr. John Pattinson said he was Public Analyst for the county of Northumberland. On the 12th August he received a sample of vinegar from Supt. Harkes marked No. 2, and he analysed it, with the result that he found only 50 per cent. of the acetic acid it contained was made from malt, and the other 50 per cent. of acetic acid was made from other sources, which he thought was derived from sugar. Cross-examined by Mr. Newlands: The total quantity of acetic acid would be about 4.6. They could not have acetic acid from malt without having some other constituents. One of these constituents was phosphoric acid, and the other was nitrogen. It was the proportion of these substances which enabled him to say what quantity was obtained from malt. Have you had any practical experience in making vinegar? No. Therefore you don't know many of the vicissitudes of its production? Possibly not, but I know a good deal about it. In the whole you said there was about 4.6 acetic acid, and it is of the presence of 2.3 that you complain of? Yes, something like that. If I took the amount of nitrogen I would say it does not contain above 20 per cent. from malt, but I have taken the more moderate estimate. These vinegar prosecutions are of a recent date? Yes. In the case tried at Bedlington you said there was 45 per cent. the same as you said 50 per cent. here? Yes. And a sample of that vinegar was sent to Somerset House? Yes. You will be prepared to admit that with the divergence of opinion that exists between you and the Somerset House authorities that there is a considerable amount of doubt in these things? Yes. Having a record of the present divergence of opinion which exists, can you really ask that your opinion should be taken as actually right? I have no doubt whatever in saying what is in it. You will give credit to the Somerset House authorities that they are right, at least you will give them a *bona fide* right in saying that they are right? Yes, but I think they are wrong. Mr. Newlands said that the Act of Parliament required the Bench to request either of the contending parties to send a sample of the article to Somerset House. Then the decision of the authorities at Somerset House was taken by both parties as right. The authorities at Somerset House were really the referees. Mr. Pattinson: The Somerset House analysis did not disagree with mine, but they have the opinion that malt vinegar may be made from malt or unmalted grain. By Mr. Newlands: Malt vinegar ought to be made entirely from malt and nothing else. You don't admit any such thing as commercial description? No. Do you say that malt vinegar ought to be made from malt and nothing else? Yes, just as I say that oatmeal should be made from oats and nothing else. You will admit that there is a house—the makers of this vinegar—been in the trade for 150 years? Yes. I say that they made it from malt 150 years ago. But you did not live 150 years ago to see? Of course not. You know that malt vinegar indicates the trade description of malt vinegar, and do you suggest that there is added acid in that? I don't say that. I have no evidence of it. Do you know that Messrs. Grimble and Co., the makers of this vinegar, supplied the Government with vinegar, and have done for a considerable time? I don't know. Mr. Alderson said he did not think it would help the Bench if they sent a sample to Somerset House. The difficulty was in this case, what was malt vinegar? That was a question simply for that Bench to decide. In the Bedlington case there was little difference between the analysis of Mr. Pattinson and theirs. Mr. Newlands said they were charged under the Act with selling something to the prejudice of the purchaser. The Act provided that if either party were not satisfied with the analysis made, the Bench could send a sample to Somerset House. He would call evidence on the warranty under which defendant bought, and if the Bench were not satisfied then he would ask them to send a sample of the vinegar to Somerset House. Mr. Edward Heslop said he carried on business in Corbridge as a grocer. He remembered Superintendent Harkes calling and asking for vinegar. He asked if it was casked or bottled, and he replied he had both. He then asked if he would guarantee the casked vinegar to be malt. He (the witness) said he would not; it was guaranteed to them, but they sold it as vinegar. The Superintendent then asked if the bottled vinegar was sold as malt, and he told him that it was sold under the maker's label. He then purchased a bottle. There was no change with the vinegar from the time he bought until he sold it. The caps were never removed from the bottles. He ordered it from price lists, which are guaranteed. Mr. Newlands said the list as well as the invoice contained the words:—"All our vinegar warranted unadulterated." Then on Messrs. Grimble and Co.'s label there was a warranty, so they had had it warranted twice. He had in his hand the price list, which stated that it was warranted unadulterated from any added acids. If the Bench believed as he did that the warranty was proved, then the case was at an end. The Chairman said the Bench was of opinion that the warranty was proved, therefore the case would be dismissed. Mr. Newlands applied for costs, but the Chairman thought he should be satisfied with the ordinary expenses.

THE INFLUENCE OF FOOD ADULTERATION UPON HEALTH.

By Dr. Alfred Hill, Medical Officer of Health and Public Analyst, Birmingham.

(Continued from page 854.)

In some cases two or three of the above substances are mixed together to constitute the preservative under a distinctive designation, e.g., boric acid and common salt; boric acid, sodium chloride, and sodium sulphate; borax, boric acid, and common salt, or these three with the addition of nitrate of potash. All these, according to Mr. Hohner (quoting Polenske), have been advertised in Germany as food preservatives, and similar compounds are put into the market in England. There is, however, this difference between the Continent and even South American States and England. In the former their use is prohibited by legal enactment, while here, in this land of freedom, the "liberty of the subject" is held more sacred than the protection of his mere health. If preservatives by means of chemical substances were absolutely necessary to save from destruction large quantities of valuable food, something might be said in favour of their use, under strict regulation; but as a fact they are not necessary, as the same object could be and is largely obtained by means of heat and cold and the exclusion of germs. At the present time, such articles as meat, butter, eggs, and fruit are brought to us from the Antipodes preserved simply by the agency of cold, whilst meat, and milk, and fruits are imported preserved by being heated and hermetically sealed.

It has been contended that the substances used are harmless, and are as legitimate for preservation of food as common salt; the obvious reply is that they cannot be proved to be harmless, while some have been actually proved to be injurious, that they are drugs and not food as common salt is; that they are not natural constituents of the foods to which they are added as common salt is; and that many of them are distinctly of a poisonous character. Salicylic acid, e.g., is a drug used principally in cases of acute rheumatism, it may be considered then to exert a powerful physiological action and cannot be desirable for habitual use in the daily food of either the sick or the healthy. But there are two kinds of salicylic acid in the market, the natural, prepared from salicin, and the artificial prepared from carbolic acid. The characters of these have been carefully studied by Dr. Charteris, who has proved that while the use of the natural acid produced no bad results, some samples of the artificial variety in the same ordinary medicinal dose caused delirium and restlessness. He found that 10 grains of the former produced no bad results in a rabbit, while the same dose of the latter caused convulsions and death. The use of salicylic acid has been condemned as injurious by the *académie de médecine* as a result of inquiry into actual cases of injury, and the *comité consultatif d'hygiène publique* of France report that all antiseptics are injurious to natural digestion.

The physiological effects of borax and boracic acid are considered by some authorities to be decidedly injurious, and many of the colouring agents employed are distinctly poisonous when pure, or are so from retaining impurities from the process of manufacture. For instance, some aniline dyes are poisonous in themselves, others from the arsenic, mercury, or zinc which they have retained owing to imperfect purification.

Vinegar.—Looking to the etymology of the word (*vin aigre*) on must conclude that it originally consisted of wine which had turned sour, it is, therefore, a natural product. Wine vinegar is the kind used in wine countries, but where wine is not grown some other natural fruit juice or infusion of a fruit is employed for the production of vinegar, as cider from apples in America or infusion of the malted grain or fruit of barley. The one object in all these cases is to obtain or produce sugar, which by the alcoholic fermentation shall yield alcohol, which by oxidation shall be finally converted into acetic acid. The original vegetable juice contains, however, other substances than sugar, such as gum, fat, gelatine, albuminous matter, &c., all of which have influence on the character of the final product, which, moreover, acquires during the alcoholic and acetic fermentations certain secondary compounds like aldehyd, acetic ether, and other volatile and fixed bodies, these yield an odour, a flavour, and various qualities which render the vinegar refreshing and appetising, and physiologically beneficial.

This short sketch of the mode of production and the character of a vinegar will enable us to compare it with certain spurious cheap compounds which have for a long time been palmed off on the public under the improper and misleading name of vinegar. Some spurious vinegars were allowed by the authorities to be supplemented by one-thousandth part of oil of vitrol or sulphuric acid, in order to preserve them, though a well-made, good vinegar requires no such fortification, as a proof of which the makers of good vinegar no longer use the mineral acid. If the use of sulphate of lime is injurious when added to wine, it seems reasonable to conclude that sulphuric acid is injurious when added to vinegar, which is, or corresponds to, sour wine.

The most general form of falsification of vinegar recently practised is the substitution of pyroligneous acid diluted and coloured. The mixture cannot lay claim to being even an additive adulteration, it is purely and simply the substitution of a substance which contains no vinegar and has never had any connection with it.

Pyroligneous acid is acetic acid derived from the destructive distillation of wood. It is at first associated with tarry matters, wood spirit, and other objectionable compounds, and requires, before being applied to ordinary use in the arts for various purposes, such as

the manufacture of white lead, acetates of lead, iron, alumina, &c., to undergo several complicated processes of purification. For these purposes it is most useful and unobjectionable, but as an article of food it stands on very different ground. In the first place it is difficult to ensure its being fully purified; next, it is apt to retain a disagreeable odour; and lastly, it represents only one, certainly the principal, ingredient of vinegar as regards quantity, but associated with none of those constituents of vinegar which give it the flavour, aroma, and other agreeable and useful characters peculiar to it. It would be as reasonable to contend that coloured alcohol and water constitute wine, as that coloured pyroligneous acid and water constitute vinegar; and just as artificial wine so concocted would be destitute of all the finer and best attributes of true wine, so the artificial liquid compounded of acetic acid and water is destitute of the best ingredients and qualities of true vinegar. Who would maintain that a wine deprived of its small quantities of gum, sugar, albuminoids, aldehyd, ethers, volatile oil, organic acids, and salts, because relatively small in quantity, retaining only its alcohol and water, is as good as the natural wine? I presume no one; and yet this is what is held by certain persons with regard to vinegar, which is only sour wine or one of its analogues sour cider or sour malt infusion. The parallel is perfect, and no competent or disinterested person could disregard the many constituents of vinegar for the simple reason that their quantity is comparatively small, without ignoring also the value of the same constituents of wine in which their quantity is no greater, but naturally about the same. I contend then that vinegar possesses chemical, physical, and physiological properties, which render it a wholesome, agreeable, and beneficial article of diet, while coloured acetic acid and water is destitute of the majority of these properties, and that its substitution is indirectly prejudicial to health.

Pickles prepared with this dilute pyroligneous acid have of late years come much into the market, and many of you must have noticed, as I have done, how they are characterised by excessive pungency and little else, possessing none of those pleasant and appetising qualities belonging to pickles prepared with genuine vinegar.

Among the pernicious additions made to food must be noticed certain salts of copper, used for colouring tinned peas, beans, and other vegetables, and bottled fruits and pickles. The poisonous effect of these salts is well known. It is often observed in persons who have partaken of food which has been cooked in copper or brass vessels, particularly when such food contains any acid, even the acid of those fatty substances which exist in the food itself. Serious symptoms are observed, showing great gastric irritation, often resulting in vomiting, nature's readiest way of expelling what is irritating to the stomach. A common emetic administered in cases of poisoning by certain substances is ten grains or less of sulphate of copper, this salt being chosen for its very rapid, because highly irritant action. If such constitutional disturbance can be caused by accidents in ordinary cooking, and by the intentional administration of only ten grains of copper sulphate, it is impossible to avoid the conclusion that the habitual use of smaller quantities in food is also injurious.

In a prosecution at Leeds, several years ago, for selling tinned peas greened with copper sulphate, half the emetic dose, viz., 4·7 grains was testified to have been found in one pound of the peas. In two other cases heard at the same time the quantities found were 3·4 and 2·7 grains respectively. Dr. Spottiswoode Cameron, the Medical Officer of Health, gave the opinion that such doses of the copper salt are injurious to health, and he further stated that five grains would kill a dog. Other evidence as to the injurious effects of copper salts was also given.

In December, 1891, a prosecution was instituted in Edinburgh for selling peas containing (per pound) 24 grains of sulphate of copper or its equivalent. Dr. Littlejohn was of opinion that the copper salt present is soluble in the gastric and intestinal juices; while Dr. Fraser gave evidence for the defence to the effect that "he found that the copper in peas is relatively insoluble . . . therefore inert and harmless," but he admitted that he did not approve of poisons being mixed with food.

In 1892 two cases were tried in the Liverpool Police-court, one in which 14 grains of copper sulphate was present, and in reference to which Dr. Hope gave evidence to the effect that such an addition would cause "indigestion of a more or less serious nature." The other case was analysed by Dr. Campbell Brown, who stated that one grain of copper sulphate was contained in the pound. Professor Fraser, of Edinburgh, with Dr. Macdougall, of Glasgow, was again called for the defence, and gave evidence similar to that which he gave in the Edinburgh case, viz., that such a dose of copper sulphate was not injurious, and, moreover, that it is converted in the peas into an albuminate which is only very slightly soluble. Now this statement contains just enough truth to make it altogether misleading. Probably it was meant that it is insoluble in water; perhaps so, but digestion is not effected by water, but by the saliva, the gastric, pancreatic, and intestinal juices; and unless the medical men called knew that the copper albuminate was insoluble in these fluids, I hold that their evidence partook of the character of either incontinence or special pleading. There is good reason to believe that their evidence was based on theoretical notions. Dr. Littlejohn considered that the albuminate, as I have said, was not absolutely insoluble, but the question has since been put to the test of actual experiment, which leads to the conclusion that the compound is entirely soluble in both peptic and pancreatic solutions. The experiments were performed by Dr. M'Leau Wilson at the suggestion of Dr. Cameron, and are very suggestive, if not absolutely convincing.

(To be continued.)

HOW MR. W. T. STEAD TRADED UPON A CONVICT'S MISERY.

Of all states of misery surely none is so pitiable as that of a convict suffering penal servitude for life. When that convict is a delicately nurtured woman undergoing imprisonment for an offence of which thousands of English men and women believe her innocent, her misfortunes alone should have made her sacred from even the very meanest of mankind. But out of this hopeless stricken women's sufferings there was money to be made. How it was made the following letter from Mr. Alexander W. MacDougall a barrister who was engaged in the Maybrick case reveals:—

SIR,—I am glad to see that you have taken up the exposure of the most prominent Apostle of Cant and Humbug of our Pecksniffian age. This man has for years been employing his talents and the opportunities which foolish men and women with money and sentiment have provided him, in turning journalism into a filthy sewer, in lieu of the clean healthy stream it was in my young days—and he is now asking the public to supply him with £130,000 to enable him to bring out "The Daily Paper" for a year. I will furnish your readers with an illustration of this man's journalism—which your reference in another column of your issue of the 18th—to the Maybrick case, as to which I and many others have, ever since the trial, now more than four years ago, feeling that a miscarriage of justice had occurred, have sought to have publicly re-investigated. W. T. Stead was at the time of the trial editor of the *Pall Mall Gazette*, in which he had dragged Journalism into the gutter with his articles entitled "The Maiden Tribute," and, in consequence of the disclosures as to Mrs. Maybrick's moral conduct the *Pall Mall Gazette* left this woman to her fate—to be hanged or imprisoned for life for murder—because she had, or was alleged to have, committed adultery. But three years afterwards W. T. Stead, finding that he could furnish the readers of the *Review of Reviews* with some filth, published an article in the October, 1892, number of that magazine about the case—in which he gave as his reason for feeling "compelled to look into an almost forgotten past"—that he had received a letter posted in South Africa from a Boer, and addressed to 'Stead, Esq., Editor of the *Pall Mall Gazette* and *Review of Reviews*, London, England,' and which contained a remarkable communication purporting to be the death bed confession of a man, who accused himself of having conspired with others to bring suspicion on Mrs. Maybrick." The letter was such a palpable and ridiculous fraud, that it is impossible that it could have been regarded as anything else by Mr. Stead, or any full grown man. But Mr. Stead said that "after reading and re-reading" it, he "came to the conclusion that it was simply impossible to refuse to look into the whole matter," and he accordingly proceeded to say, "I feel compelled, for the first time since the case was reported, to let the public understand what kind of man James Maybrick was." James Maybrick, whatever kind of man he was, had at that time lain in his grave for three and a half years, and the raking garbage over his grave could not possibly afford any answer to the only question involved in the Maybrick case, viz., Did Mrs. Maybrick poison her husband in 1889?—but this carrion crow of morality proceeded to say of him, that before marriage he had led an immoral life. "But that was not all. James Maybrick was false to the young wife whom he had brought to his polluted home. His relations with loose women could have been proved in Court, and as a result of his misconduct, marital relations were suspended for the last two years of his life. It was not, however, for her sake that this virtual separation took place. He said he did not wish to injure any children he might have."

Mr. Stead was brought to book by James Maybrick's friend for this filthy insinuation, and in the next number of *Review of Reviews* he withdrew it in the following words:—

"Mrs. Maybrick's statement that the reason why cohabitation was suspended was on account of her husband's declaration that he had contracted a disease which he was afraid of transmitting to his children, is traversed by a certificate from his medical man, denying that Mr. Maybrick suffered from any such disorder, and by the certificates of the medical men who made the post-mortem examination, which negated the existence of such disease. I should have modified my article in these points had I then been in possession of the information that has since been laid before me, and I should have done so all the more readily, as it in no way affects the main features of the case which I have brought before the public."

That Mr. Stead should have added to the iniquity of raking such garbage on a dead man's grave, the cowardice of sheltering himself from the consequences of the lies he had told about this dead man by saying that it was "Mrs. Maybrick's statement," caused me greater indignation than I had ever felt in my life at anything I had ever seen in journalism. It was within my professional knowledge that Mrs. Maybrick had given her legal advisers at the time of the trial the most stringent instructions that in defending her from the charge of poisoning her husband, not a word should be said which would cast any reflection upon her husband's memory, whatever the result of such a generous line of defence might be to her; and it was, moreover, perfectly clear that Mr. Stead could not possibly have obtained any statement of any kind on the subject from Mrs. Maybrick, who is imprisoned as a convict for life at Woking, and I wrote to her mother, the Baroness de Roques, calling her attention to these statements by Mr. Stead respecting James Maybrick, and

protesting that it was her duty to repudiate, on her daughter's behalf as she could not speak for herself, the truth of such statements concerning her husband. The Baroness de Roques replied to me—

"As to Mr. Stead, I have the greatest respect for his sincere belief in Mrs. Maybrick, for his talents and head, and if he said too much in his article, he erred in judgment. It is not for me to cavil at details. He proclaims her innocence and right to liberty. Mrs. Maybrick certainly knows nothing of, and suggested none of, Mr. Stead's article. She is not allowed to talk on her case or the trial when I have seen her, so she has had no hand in any word published by anyone the last three years."

Now, Mr. Stead, in order to shelter himself for having made false statements about a man who had lain in his grave for three years, defended himself when brought to book about them by James Maybrick's friend, by the distinct allegation that it was "Mrs. Maybrick's statement," and the woman's mother felt that it was not for her "to cavil at detail." The matter has been allowed to pass, but it is perfectly plain that this absent imprisoned woman, who at her trial defended her husband's memory by the stringent instructions she gave her legal advisers, that no matter what the result to her, no word should be said against her husband, is absolutely and entirely ignorant of what Mr. Stead put into her mouth. The reason for Mr. Stead's feeling "compelled" to bring the subject before the public, and to rake garbage over the character of a man who had lain 3½ years in his grave, has, however, since become apparent. The Baroness de Roques has recently issued a pamphlet which throws a lurid light upon Mr. Stead's journalism, for in it she sets forth among the "efforts" that have been made to rescue her daughter this article of Stead's, as to which she says:

"In October, 1892, Mr. W. T. Stead published in the *Review of Reviews* a resumé of the case, and an eloquent appeal, with an excellent photograph of Mrs. Maybrick, urging the British Government to release Mrs. Maybrick as a tardy act of justice. In addition to the wide circulation which the *Review of Reviews* has, ABOUT 10,000 COPIES OF THE ARTICLE WERE CIRCULATED."

In journalistic enterprise 10,000 copies of a sixpenny periodical is a matter for the consideration of such an enterprising journalist as Mr. Stead, and I can also now understand how it came about that a free copy of this number of the *Review of Reviews* was sent to me from Mr. Stead's office. I suppose I was one of the 10,000!

Mr. Stead now asks the public to supply him with £130,000 to bring out "The Daily Paper" for one year!

Yours, &c.,

ALEXANDER D. MACDOUGALL.

Oakhurst, Westcombe Park, S.E.

If Mr. MacDougall's and the Baroness de Roques' statement be correct, and 10,000 extra copies of the *Review of Reviews* were circulated, it would seem that by the invention of a confession, and a slander upon an imprisoned unfortunate woman who had no means of disowning Mr. Stead's statement, a sum of about £250 was apparently drawn from sympathisers with Mrs. Maybrick, and that even the jail itself is not secure against the arts of the *Exploiteur*. And this is the Jasper Sterling! the new saviour of mankind!!

ANALYTICAL VAGARIES.

A propos of the articles on vinegar by "Expert," which we recently published, a correspondent writes:—

SIR,—There seems something irresistibly funny, though very important, in the way the tables are being turned in the crusade now going on against vinegar, and which illustrates how zeal, when excessive, defeats its purpose.

First. The makers or "fakers" of an undeniably spurious article were called to book and their deeds brought to light to the advantage of all the general public concerned.

Secondly. The maker of the genuine, having succeeded in abstracting certain matter of impurity, is punished for so doing, because it seems the Public Analyst is thereby deprived of his chief means of estimation of origin, and for this purpose he desires to see the impurity retained.

Lastly. The "faker," quick to learn the weakness and nature of the Public Analyst's so-called test, calls to his aid the trained skill which is discouraged in helping honesty to improve his out-put, and by adding the very impurities which the latter discards upsets the so-called tests, and his article passes muster.

Thus we see the honest maker of a pure article pilloried, and the "faker" of a still more faked-up article triumphant.

An analysis of foods to determine the amount of nutrition in each is being made by Professor Atwater and several well known Analysts in America for the information of the World's Fair Awards Committee in Chicago. The samples include specimens of preserved meats and fresh meats, of foreign as well as domestic origin.

NOTICE TO OUR READERS.

It has come to our knowledge that some newsagents have inserted leaflets in our journal, of so-called electric belts, and other nostrums. If any of our readers, whose copies have contained such objectionable leaflets, will communicate with us, stating from what newsagent they received the copies, we shall be obliged. We feel it necessary to thus refer to the matter, that our readers may know that the dissemination of such literature in our journal is against our wishes.

CUSTARD, EGG, AND BAKING POWDERS.

The report of Mr. Peter Fyfe, Chief Sanitary Inspector, Glasgow, contains some interesting facts *re* custard and egg powders. Samples of these powders were purchased and submitted to Dr. Clark, Public Analyst, Glasgow, for analysis. Four were manufactured by well-known makers, viz.: Messrs. A. Bird and Sons, Birmingham; Goodall, Backhouse and Co., Leeds; Yeatman and Co., London; Geo. Borwick and Co., London, and the fifth was an article called the "Model Egg Powder." The following are the results of the analyses by Dr. Clark, as reported by Mr. Peter Fyfe.

	Bird's Custard Powder, Birmingham.	Goodall's Custard Powder.	Goodall's Egg Powder.	Borwick's Egg Powder.	Yeatman's Egg Powder, London.	"Model" Egg Powder.
Starch	86.25	84.45	51.03	26.38	52.32	53.82
Albuminous Compounds	0.59	0.58	6.01	2.96	6.00	5.06
Soluble Colouring Matter	0.88	0.90	—	—	—	—
Bicarbonate of Soda ..	—	—	15.38	50.70	22.11	26.71
Tartaric Acid	—	—	18.69	10.33	11.37	6.19
Phosphates	—	—	0.24	—	—	—
Carbonates of Magnesia and Lime	—	—	2.70	—	—	—
Chloride and Sulphates	—	—	—	—	—	Traces
Water	11.83	13.69	11.00	9.63	8.20	8.22
Ash	0.45	0.38	—	—	—	—
Totals	100.	100.	100.	100.	100.	100.

"The manufacturers of 'Borwick's' and the 'Model' samples state on the label attached to each packet that one packet is equal to 4 eggs. They do not say *what kind of eggs*, but presuming the common hen's egg is meant, I wish to show the difference in weight between the albumen, or essential of an average hen's egg, and the albuminous compounds found in the samples. The average egg weighs 200 grains, and contains 45 grains of albumen, 20 grains of shell, and 135 grains of water, while the 'Model' packet of powder contains 24½ grains of albumen, and 'Borwick's' packet of powder contains fully 7 grains of albumen, so that instead of one packet being equal in albumen to four eggs, it would take seven 1-oz. packets of the 'Model' egg powder and twenty-five ½-oz. packets of 'Borwick's' egg powder.

"As will be observed from Dr. Clark's analysis, starch and baking soda form the main part of the mixture; and he indicates an opinion that the very small quantity of albuminous matter found in all but two of the samples has been derived from a *vegetable* origin. Not one of the samples contains within fifteen grains of the albumen yielded by one egg."

That there is great room for improvement and for more accurate declarations as to values and constituents in egg and custard powders the above analyses by Dr. Clark clearly prove. Makers of these goods are still very far away from producing a really desirable article. Thanks to our exposures and exertions, alum in baking powder has no longer the extensive sale it formerly had; but manufacturers of unalimed powders have else taken little care to produce an article of healthful and beneficial, as well as adequate leavening power. Not so the American manufacturers. A sample of Horsford's Baking Powder we recently analysed yielded the following results:—

HORSFORD'S BAKING POWDER.

Phosphoric acid	22.70
Bicarbonate of soda	28.02
Starch	33.78
Lime, combined with phosph. acid	8.93
Available carbonic acid	13.70

This is a really well devised powder, and one that has long gained a recognised position for itself. Its leavening power is very considerable, quite as large as that of good tartaric powders, and the phosphoric acid introduced by its means into the food cannot but be beneficial in many cases, and unobjectionable in all. We have satisfied ourselves that the acid phosphate employed was made from pure materials, especially with the use of pure mineral acid, the commonly found trace of arsenic being entirely absent.

Now that alimed baking powders are at last declared illegal and injurious to health, there remain but two kinds of legitimate baking powder: tartaric acid, including cream of tartar powders and the phosphatic ones, of which Horsford's is the best known and original representative. Our analysis proves that the reputation which it has acquired rests upon good foundation.

The latest county that has determined to put the acts into force to suppress adulteration is Forfar. At a meeting of the County Council on November 13th a motion was agreed upon that the Medical Officer and the Sanitary Inspector should be instructed by the Sub-committee on Public Health to carry out the Food and Drugs Acts.

COCOA PROSECUTION.

The desirability as a protection to the grocer of a different name being adopted for mixtures of cocoa, starch, and sugar, is again shown in the following case. The word chocolate used for all such preparations, would save many vexations to the manufacturers and to retailers.

At Camborne, Charles Hosking, grocer, Hayle, was summoned for having sold cocoa adulterated with starch and sugar. Mr. Cross, of Bristol, defended. Superintendent Coombe proved purchasing of defendant vinegar and cocoa for analysis. The vinegar proved to be pure. The cocoa, according to Mr. Kitto, the County Analyst, was mixed with starch and sugar. In cross-examination, witness admitted that the box produced was that from which the cocoa was taken, but he did not see the notice upon the box stating that the contents were not pure but were mixed with certain other ingredients guaranteed by Act of Parliament to be harmless, and which were nutritive. Such a notice, however, was on the box now produced. Mr. Cross stated that the articles denominated "starch" were really sago and arrowroot. They were put in not to benefit the manufacturers, Messrs. Fry and Co., but to suit the taste of some of the public, and a corresponding reduction in the price was made. Had the complainant asked for pure cocoa he would have been supplied with it. But he merely asked for cocoa, for which he paid only a halfpenny per ounce. Anybody, except perhaps a police inspector, must have known that cocoa sold at 1d. an ounce could not be pure cocoa which costs 1s. per lb. Mr. Pendarves: It does not matter what the price was said to be; if cocoa was asked for, cocoa ought to have been supplied. Mr. Cross: But when people ask for cocoa they do not mean absolutely pure and unmixed cocoa unless they say so. If a man goes into a hotel and asks for a cup of tea, can he afterwards prosecute the seller because it contains milk? (Laughter.) The Bench believed there was no intention on the part of the defendant to defraud, but still he had not complied with the letter of the law. Mr. Cross said Messrs. Fry always sent out wrappers to the retailers in which to place the cocoa, and they had done so in this case, but owing to an accident the defendant had not had them put on. But there was a plain notice on the box that the cocoa was not pure, but mixed in the usual way for cocoa of that price and kind. At one time it was impossible to manufacture cocoa without adding farina of some sort. Now it was possible, but many people still preferred that mixed with farina, which in this case was sago and arrowroot. The offence was a purely technical one, and if the wrappers had been placed on the cocoa in the box no summons could have been taken. The Bench held that the Messrs. Fry were in no way to blame. Defendant having failed to attach the labels to the parcels of cocoa, must pay the costs.

Messrs. Fry would be well-advised to consider the question of a distinct nomenclature for mixtures.

MR. KEATING STOCK, F.I.C., DURHAM PUBLIC ANALYST, ON CERTIFICATES.

In a report just issued Mr. Stock says:—

In two of these cases (spirits) which were heard at the South Shields Petty Sessions, and in which proceedings were taken by the Inspector for the Hebburn Local Board of Health, objection was made to the form of my certificate of analysis, and, the objection being held to be good, the cases were dismissed. My certificate read as follows:—"I find that the sample contains an excess of water over and above what is allowed by Act of Parliament. I estimate the excess of water at — per cent. of the entire sample. I am of opinion that the sample is not a sample of genuine (rum, brandy, whisky, or gin as the case may be)." Now the fact is that not in one case in a thousand is the amount of water in a sample of spirit ascertained in any other way than by estimating it from the specific gravity of the sample after distillation. It can be deduced with great accuracy by this method, and it is a method common both to Analysts and the trade. The word "estimate" is properly used in analysis when a substance is not obtained by direct determination but is arrived at in some way which does not involve the actual weighing of the substance itself. It is a word which truthfully expresses what has been done. I have made hundreds of certificates out in the same way, and no objection has ever been made before. I hardly think such objection could be sustained.

LARD.—Fifteen samples have been analysed, and six have been returned as adulterated. In most of these cases I have found 5 per cent. of beef fat. I do not think it would be expedient to make further reference to this matter at present. I shall probably have to return to it again.

VINEGAR.—Eleven samples have been analysed, and five have been found not to have been produced from malt alone, although they were sold as "malt vinegar." There is no doubt that good and palatable vinegar can be produced from substances other than malt, but such vinegar has not the qualities and properties of malt vinegar, and this fact alone, apart from any consideration of ease of production or value of raw materials, renders the putting into operation of the Food and Drugs Act a very proper step when such vinegar is substituted for genuine malt vinegar.

The position taken up by your Inspectors is that when vinegar is sold as malt vinegar it must have the qualities and properties of malt vinegar. If simply sold as vinegar it may be produced by the fermentation of alcoholic liquors other than malt liquors, but "vinegar" so called which contains any admixture of wood, acetic acid (or pyroligneous acid), cannot lay claim to the name of vinegar.

DR. F. L. TEED ON TAKING SAMPLES, AND ON "LLOYD'S COWS."

Dr. Teed's reports are always interesting and instructive. In that just issued to the Camberwell authorities, Dr. Teed says:—

"The percentage of adulterated samples was 16·7, being the lowest percentage as yet met with since my appointment. This may be regarded as somewhat strange, as only last quarter occurred the highest percentage within my experience. It may be merely coincidence, but it is noticeable now in Camberwell, that your Sanitary Inspectors appear in official coats on which is embroidered the title of their office. As already remarked, the diminution of adulteration, and the appearance of the official collar, may have no further connection than mere coincidence, but I would venture to suggest to your earnest consideration that when an official is engaged on detective work, as a Sanitary Inspector is engaged when collecting samples, whether it would not be advisable in the interests of honest traders and of the purchasing public, that he should lay aside his official uniform, and appear merely as a member of the public.

"There has been a case of alleged milk adulteration, which has apparently exercised a certain influence on the minds of Magistrates, and has assisted the defendants to escape in several instances. I am alluding to the case where a Metropolitan Public Analyst reported that a sample of milk contained 4 cent. of added water. The defence produced an Analyst, not a Public Analyst, who had examined the reserve sample and he reported that the milk contained 9 per cent. of added water. The Analyst for the defence also examined a herd of seventeen cows, by which the alleged adulterated sample was said to have been produced, and reported that he had seen the seventeen cows milked, had taken an average sample, and found it to be of such quality that if he had received it from another source he should have returned it as containing 8 per cent. of added water. It is not reported that the Analyst for the defence was submitted to anything approaching a proper cross-examination, and the case was dismissed.

"If we accept that the evidence of both Analysts was given fairly and without bias, and that they were both competent Analysts, and further, that they originally examined the same sample of milk, and that both analysed it when still fresh, the only conclusion we can come to is that the defending Analyst took a far higher standard for the quality of milk than the Public Analyst did. Not knowing the standards taken by either Analyst, it is impossible to say what standard the Public Analyst took, but it is obvious it was 5 per cent. lower than that of the defending Analyst. In the case of the sample taken by the defending Analyst when he saw the cows milked, the amount of extraneous water would have been only 3 per cent. on the Public Analyst's standard. If we assume that the cows were fairly and properly milked, including the strippings, that the cans were perfectly dry, and that no conjuring tricks were performed before the milk reached the Analyst's hands, an assumption in which everything is in favour of the vendor, the only important point arrived at is that a certain herd of cows did on one occasion yield milk with 3 per cent. more water than the particular Public Analyst in question considered a genuine milk should contain. A few questions in court would probably have thrown a great deal more light on the case, but in the absence of that light, I have no hesitation in saying that it is far better to trust to the 250,000 and upwards of published analyses of genuine milk made by perfectly unbiased people, than to trust to the results in one case of one man, whose standards and methods are unknown, except that they yield results differing by at least 5 per cent. from those of a responsible public officer."

WILL THEY EXHIBIT ALSO THE CAUSE WHY HAMBURG BUTTERS BEAT THE RECORD IN SWINDLING?

For the advancement of the butter production in the Duchies of Schleswig and Holstein, it has been decided, at the instance of the agricultural experimental stations, to bring about periodical butter shows in Hamburg. Prizes will be given, and it is confidently hoped that such shows will have as good an effect there as in Denmark and Sweden. The first exhibition will be held in November, in the new refrigerating house in Hamburg, and they will afterwards be repeated with three months' interval. Fifty dairies will be invited to exhibit every time. The butter will be judged twice, the first time on receipt, and the second time fourteen days latter. The names of the exhibitors will be published, and prizes given to the dairyman.

OBITUARY.

By the death of Mr. Henry Froser Walter, J.P., of Papplewick Hall, Notts, English agricultural welfare loses one of its most earnest friends. Mr. Walter was one of the proprietors of the *Times*. He was born in Printing House-square, April 17, 1822, and was educated at Eton and at Exeter College, Oxford. Mr. Walter of late years took Papplewick Hall, had settled down to the life of a country gentleman of the old school, occupying himself with shooting, cattle-breeding, and egg-collecting, and keeping almost open house for his poorer neighbours. His Channel Islands cattle and Berkshire pigs were not to be beaten in the county; his collection of eggs was very extensive, and included a rare specimen of the great auk; while he had been a fine shot from his youth up. He was one of the proprietors of the Linby Colliery, but it was an open secret that during the recent strike his sympathies were with the men, and he practically kept fifty or sixty of the sufferers throughout the struggle. Since the passing of the Local Government Bill he had taken a keen interest in affairs, and his death is attributed to a chill caught while attending a meeting of the County Council. He was one of the earliest subscribers to this journal, and the good work done within the past six months in suppressing adulteration in Nottinghamshire, and giving English dairy farming fair play, has been in a great measure due to Mr. Walter's enlightened appreciation of the importance of this question to English industries.

MORE BOARD OF AGRICULTURE JOBBERY.

In addition to the twenty-four incompetent nobodies, whose support was shovelled upon the country three weeks ago, another ten, double-barrelled named, connections of one political hack or another, have got appointments as Inspectors this time to carry out the provisions of the Swine Fever Act. They are—William Lowry Coll, William Henry Fitzroy Landon, Percy Herbert Morris, Henry George Porter, Frank Townsend Wilson, Hon. Richard Henry Holmes-A'Court, John Hamilton Martin, Arthur Hamilton Pryce, Reginald Selby, and George Bridger Shiffner. There may be one expert amongst them, but as to the knowledge or fitness of the other nine—well, we doubt if they know enough to draw their salaries. Mr. Gardner is making his office ridiculous.

BRITISH AWARDS AT CHICAGO.

Keen, Robinson, and Co. (Limited), Garlick-hill, Cannon-street, E.C., have been adjudged five awards, each being made for highest merit only, at the Chicago Exhibition. Mr. J. Edmunds, Barnsbury, N., has received notice of an award for his "Empress" curry powder at the World's Fair, in addition to four other awards gained by his various exhibits. The following firms have also received awards:—Messrs. Brunner, Mond, and Co., Limited, Northwich, for alkali and bleaching powder; T. Biggs, for sheep dip; Messrs. Lever Bros., Port Sunlight, for soap; and the United Alkali Company, Limited, Liverpool, for alkali, potash, bleach, and fertilizers.

Our readers who know the excellence of Messrs. F. C. Calvert and Company's carbolic acid and carbolic preparations, will be pleased to learn that Messrs. Calverts received the highest award for carbolic exhibits.

WASTING AUSTRALIA'S MONEY.

We are informed that the Australian Government is sending Mr. Wilson, a so-called dairy expert, to India, China, and other Eastern Countries, with the object of opening up markets for Victorian dairy produce.

If this be the same Mr. Wilson who was in England a few months ago, we do not think much will come of the attempt. Whilst in England he did not take the trouble to see any Public Analysts, or Food and Drug Act Inspectors, and but few buyers of any importance, but wasted his time with persons of the Cameron, M.P., stamp, who, even if they had any knowledge, have not one atom of power to do a tittle of good to Australian butter.

INVENTIONS.

THE "COMET" BOOT TREE.

Manufacturers, E. and W. Belden, Great Dover-street. Specimens at Lepidigures, 79, Strand, W.C.

This is an ingenious invention, designed to supersede the old-fashioned three-piece boot tree. The Comet tree, as a whole, is the shape of a boot, and consists of three pieces, which may be described as the foot and instep piece, the heel, and the ankle. Through the centre of the foot and heel are cut one slot in each, in which is fitted a metal plate; this plate moves through the slots, and is pivoted at each end. The other end of the plate is attached to the ankle. The arrangement is such that the tree can be inserted without the slightest trouble into a boot, and the component parts fall immediately into their proper places. We have no hesitation in recommending the new boot trees to the attention of the public, and in saying that they are the *desideratum* of trees. Another new invention of the same firm is a device by which a boot may be dried or warmed whilst it is on the tree. The tree is hollowed out and the necessary heating obtained by the insertion of a small piece of metal, previously heated by a spirit lamp, in the hollow part. A thick sock of absorbent material is placed underneath the heating chamber. The boot is said to retain the heat for about three hours. This should be a great boon to railway travellers, and persons suffering from cold feet.

KILVERT'S LARD.

The solicitors of Messrs. Kilvert and Sons have addressed a letter to the Durham County Council stating that:—"Our clients have no doubt whatever as to Mr. Wilson's bona fides in stating that the lard in question was theirs, but they equally have no doubt that lard containing 7 per cent. of beef stearine was not in fact their lard, and they accordingly did not take up the defence. Our clients have always defended any attack upon their lard without cost to a customer, and intend to continue to do so. The case having, up to the present, been decided upon an issue other than the purity of our clients' lard, they instruct us to inform you that in accordance with the spirit of their guarantee they invite you to adopt proceedings against them, either in connection with the present case or in connection with any lard of theirs sold in your county, and they will give every assistance to the proceedings which you may think proper to adopt."

DANISH BUTTER.

The need of a vigilant application of the Adulteration Acts to imported as well as to English butter is indicated by the fact that in Denmark, from which the English public, in default of a sufficient home production, draws so large a supply, as much as 16,000,000lb. of margarine is manufactured every year. Much of this product is no doubt consumed by the Scandinavians, who find the price of honest butter too high for them; but the provisions of the native law against adulteration are lax compared to those in force in this country, and many people in Denmark eat margarine under the impression that they are regaling themselves on an unadulterated farm product. It is always possible, therefore, that some of the so-called Danish butter may at the best be a mixture of butter and margarine.—*Leicester Journal*.

THE LOCAL GOVERNMENT BOARD'S TWENTY-SECOND ANNUAL REPORT AND THE FOOD AND DRUGS ACT.

Continued from page 355.

Boards of Works respectively is accurately represented by the statement that in the former district, of 122 samples analysed 62 were condemned, while in the latter district, of 103 samples examined all but five were reported as genuine; and it is significant that while (in the whole of London) 692 samples of milk were reported against by the Analysts, proceedings against the vendors were taken in little more than half this number of cases. In this matter there is evidently diversity of practice. In Greenwich, for example, proceedings were successfully taken in respect of 15 out of the 16 samples reported against, and penalties amounting to £33 were inflicted. In Bermondsey, out of 27 samples condemned by the Analysts, 24 were the subject of proceedings, and the fines imposed in 23 of these cases amounted to £138 10s. On the other hand, while 81 samples were reported by the Analyst for Plumstead as adulterated, proceedings were only taken in five instances; and while 38 samples were reported against by the Analyst for Kensington, there were only 13 prosecutions, of which one was unsuccessful. We have no means of knowing how far these differences are due to discrepancies of practice, as regards the classification of samples as adulterated or as genuine, on the part of the Analysts, and how far they may be attributable to the fashion in which the attitude of particular authorities differs from that of others with respect to the institution of proceedings for enforcing the Acts.

The practice of taking samples of milk at railway stations in its transit between the farmer and the retailer continues to be adopted with beneficial effect. Complaints are made, however, that the fines inflicted in such cases are often insignificant in comparison with the profit to be derived from this wholesale adulteration. In commenting on the imposition of penalties of 10s. each in two such cases, Mr. Stokes, Public Analyst for Paddington, remarks as follows:—

"With such fines the Food and Drugs Act is practically a dead letter. With such continued and wholesale adulteration what chance has the retailer of any protection? It is quite possible that the two firms to whom the milk was consigned might have sold this milk (of the adulteration of which they were quite innocent) in some dozen parishes of London, rendering themselves liable to a fine of £20 in each parish, while the actual offenders, the farmers, get off with fines of 10s. each."

With regard to one of the consequences of tampering with what is the chief food of young children, Mr. Teed, Public Analyst for Camberwell, writes as follows:—

"Of course indirectly many fraudulent adulterations have an injurious action on health, as, for instance, where children are fed on skimmed or watered milk instead of on whole milk. . . . The direct damage of a fraudulent adulteration may easily be calculated in pounds, shillings, and pence, but its indirect effects can only be approximately estimated from the statistics of the number of rickety children suffering from mal-nutrition through being deprived of a sufficiency of good and genuine milk."

Mr. Bell, Public Analyst for Cheshire, in commenting on two samples received from one of the workhouses in that county, which were found on analysis to be skim milk adulterated respectively with 40 and 50 per cent. of water, observes that "All will agree that this is a most cruel form of adulteration, for it is hardship enough to be in the workhouse without having to drink skim milk containing 50 per cent. of (added) water." The instance leads him to suggest that guardians should take special care to ensure the purity of the milk supplied to the poor under their charge.

London continues to be much worse off than provincial towns in this matter. While more than one-fifth of the samples of milk from metropolitan districts were pronounced to be adulterated, the average proportion in the other "thirty-two large towns" of the Registrar-General's returns was less than one-tenth. Manchester and Salford are conspicuous for comparative freedom from adulteration, the proportion of condemned samples being only about 5 per cent., while at the other end of the list is West Ham, where 35 samples were condemned out of a total number of 75 analyses. It is noticeable that in 29 out of these 35 cases proceedings were successfully instituted, and penalties amounting in the aggregate to £103 10s. were inflicted by the magistrates.

Of the entire number of 1,818 samples of milk reported as adulterated, 1,180 were the subject of legal proceedings, 86 cases were dismissed, in 38 the costs only were imposed, in 12 there had been no decision when the return was sent to us, while in the remaining 994 penalties amounting in all to £2,050 7s. 2d. were imposed. There were 99 fines of £5 each, 10 between £5 and £10, 27 of £10, two between £15 and £20, and five of £20.

Out of 1,189 samples of bread and flour examined, only three were reported against. Two penalties were imposed; one of £5, the other of £1 10s.

The sale of adulterated butter, which seemed to have received a check in 1890, when the per-centage of samples reported against was only 11·5, has again risen, and both in 1891 and 1892 more than 15 per cent. have been condemned. Not only has the mixture with margarine become more general, scientific knowledge being brought to bear upon the sometimes elaborate processes employed, and detection being thus rendered more difficult, but the art of introducing as much water as possible has been assiduously cultivated. Of course

To be continued.

BORIC ACID IN BUTTER.

An interesting correspondence has taken place between the Local Government Board and the Kensington Vestry upon this question. Mr. O. E. Cassal, F.I.C., Public Analyst, thus refers to it in his report for the June quarter, 1893:—

Of 20 samples of butter analysed 14 contained boric acid preservatives. Inasmuch as this has hitherto been regarded as constituting adulteration, the percentage of adulteration has previously been increased by the number of butters found to contain boric acid preservatives. In previous reports, the grounds for certifying samples of food containing boric acid as "adulterated" have been fully stated; but it is held by many that the addition of boric acid compounds to butter ought not to be regarded as an adulteration, and this circumstance may, no doubt, lead to the innocent employment of these substances, under the impression that no objection can be raised against it. In drawing up the Statutory Report it has hitherto been necessary to return articles containing the preservatives as "adulterated."

In view of the fact that the presence of boric acid in butter does not appear to have been universally regarded as an adulteration, your Vestry thought it desirable to obtain a definite opinion from the Local Government Board on the subject, and the following letter was accordingly addressed to the Board by the Vestry Clerk:—

TOWN HALL,
KENSINGTON,

16th May, 1893.

[COPY.]

SIR,—I have been directed by the Vestry of Kensington to bring under the notice of the Local Government Board the extract which appears in the enclosed report of the Public Analyst of this parish, dealing with the question of whether samples of butter found to contain boric acid preservatives should or should not be reported as adulterated.

From such extract it will be seen by the Board that the percentage of adulteration in this parish is appreciably increased, owing to our Public Analyst, Mr. Cassal, holding the opinion that he has no option, in drawing up his Statutory Report, but to return samples of butter containing boric acid as adulterated, and this view my Vestry have no desire to combat. They, however, learn that some of the Public Analysts report such samples as genuine, and this being so the Vestry feel that by reason of the difference of views which appears to prevail among the Public Analysts, this parish, and those parishes and districts whose Public Analysts act in accord with Mr. Cassal, are prejudicially affected as regards the comparisons which may be drawn from the abstracts of reports of Public Analysts which are published in the Annual Report of the Local Government Board.

The Vestry accordingly deem it expedient to seek some direction at the hands of the Board upon the point, and to request that the Board will state whether samples of butter containing boric acid for preservative purposes should be returned in the statutory report of the Public Analyst as adulterated or genuine, so that uniformity of procedure may prevail throughout the parishes and districts in which the Sale of Food and Drugs Acts are enforced.

I have the honour to be, Sir,

Your obedient Servant,

(Signed) WM. CHAMBERS LEETE,

Vestry Clerk.

The Secretary,

Local Government Board,
Whitehall, S.W.

To this letter the following reply was received:—

[COPY OF REPLY.]

Local Government Board,
Whitehall, S.W.

25th May, 1893.

SIR,—I am directed by the Local Government Board to acknowledge the receipt of your letter of the 16th instant, enquiring on behalf of the Vestry of the Parish of St. Mary Abbots, Kensington, whether butter found to contain boric acid for preservative purposes should or should not be reported as adulterated.

I am to state that the question is one which the Board have no authority to decide, but they may refer the Vestry to note (d) appended to the form of certificate in the schedule to the Sale of Food and Drugs Act, 1875, which authorises the Analyst to insert at his discretion his opinion whether any mixture was for the purpose of preserving the article, and whether it was excessive. I am also to refer to the remarks on the subject at page 6 of the enclosed extract from the Board's report for 1890-91.

I am, Sir,

Your obedient Servant,

(Signed) ALFRED D. ADRIAN,

Assistant Secretary.

To W. C. Leete, Esq.,

Clerk to the Vestry of the Parish of St. Mary Abbots, Kensington.

The following are the remarks in the extract from the Board's report alluded to in the above letter, the italics being mine, to show the more important points:—

"It may be noted that the use of boric and boracic acids as preservatives of butter and other substances liable to decompose speedily seems to be finding increased favour among dealers, and is at the same time creating a difficulty for Analysts, since

it is not always clear in what cases the addition may come within the proviso of section 6 of the Sale of Food and Drugs Act, 1875, with regard to "any matter or ingredient not injurious to health" which "has been added to the food or drug because the same is required for the production or preparation thereof as an article of commerce or in a state fit for carriage or consumption." *There is no doubt that boric or boracic acid, if taken in large quantities, would be injurious to health, but we have no sufficient information to show whether such minute amounts as are generally added as preservatives could be regarded as having that effect, and more exact information is wanted before it can be decided whether a process which prima facie may be regarded as intended to prevent the loss of valuable food must be held to be prohibited by law.*

The present attitude of the Local Government Board on the subject, at any rate with respect to butter, is made perfectly plain by the reply of the Board to the Vestry's letter and by the extract quoted. While adhering, therefore, to my previously-expressed opinion that the *unacknowledged* presence of boric acid preparations in food constitutes adulteration, I shall feel justified, in future, in classifying samples of butter containing boric acid as "genuine," and in merely reporting the presence of that substance when it is found to have been added.

DEALING WITH WARRANTY GIVERS.

At West Hartlepool, on November 6th, John W. Robinson and Co., wholesale provision dealers, Gateshead, were charged with giving a false warranty in writing. Mr. H. Simpson appeared for the prosecution, and Mr. H. Darling, of Newcastle, for the defence. Mr. Simpson said that Mr. Wheat, Inspector under the Food and Drugs Act, called at Mr. Boddy's shop and purchased a $\frac{1}{2}$ lb. of lard, which was afterwards sent to be analysed. It was proved to be adulterated, and a resolution was passed by the Corporation to proceed against Mr. Boddy. In the meantime, Mr. Boddy had handed a warranty to Mr. Wheat which he received from Messrs. Robinson and Co. The committee's decision was withdrawn, and the firm proceeded against. Mr. Simpson showed by the Analyst's certificate that the sample of lard contained 18 per cent. of beef fat. Mr. Darling said his clients purchased the lard under a written warranty from the manufacturers. He asked the Bench to dismiss the case, and take whatever steps they thought proper against the parties by whom the adulterant had been inserted. The Bench retired for a few minutes, and on returning the Mayor said they were of the opinion that the liability rested with the parties who gave the warranty to the retailer. The defendants were fined £5 and costs, the costs amounting to £1 7s.

BAD MEAT FOR HUMAN FOOD.

At the Middlesbrough Police-court, on November 13th, Mr. J. R. Stubbs presiding, two Middlesbrough butchers, named James Kay and Thomas Humphreys, carrying on business in Cannon-street, were charged with being in possession of unsound meat and preparing it for the food of man at the public slaughter-house on the 19th ult. When Mr. Anderson made the seizure it had obviously not been long slaughtered. It was quite clear that the animal had suffered from tuberculosis. The meat was quite unfit for human food. Mr. George Anderson, Sanitary Inspector, said when he visited the slaughter-house Humphreys was dressing the meat in the manner usual when being prepared for the food of man. The two fore-quarters were next the wall. He examined these quarters, and the walls of the chest were one entire mass of tubercles. The lungs had adhered, and they had been forcibly torn out. He asked for the lungs, and Humphreys brought a sound set. But these did not come from this animal, as they were perfectly sound and quite cold. The meat was absolutely unfit for food. He produced an order from Dr. Walker, J.P., to this effect. Humphreys in the presence of Kay admitted that the heart, liver, and kidneys had been sold. By Mr. Jaynes: Humphreys did tell him he wanted him to look at a beast, but not until he was inside of the slaughter-house. It was necessary to bring these proceedings even after the carcass had been destroyed, because he had repeatedly for months past cautioned these men about the quality of the meat; it was not meat they were selling. Humphreys afterwards admitted that the lungs he at first showed were not the lungs of the beast. Dr. Malcolmson said he saw the carcass, which was entirely unfit for food. Mr. Barker, veterinary surgeon, gave corroborative evidence. In reply to the chairman, witness said that a butcher looking at this beast when alive would have known it was diseased. Anyone eating of the meat would have been likely to contract tuberculosis. Mr. Jaynes, for the defence, said there was no intention on the part of these men to sell this beast for food until after the Inspector had seen it, because as soon as they saw that something was wrong with the lungs Kay went for Mr. Anderson, and as soon as Mr. Anderson arrived Humphreys informed him that he had a beast for him to look at. He asked their Worship to say that there was no intention on the part of the men to dispose of the beast for the food of man without showing it to the Inspector. The defendant Humphreys denied having brought any lungs for Mr. Anderson to look at. In reply to Mr. Jas. Smith, Humphreys said the liver and kidneys were sold, but these were in his opinion quite fit for human consumption. The Bench retired, and returning said they considered the case proved against the defendants. They were determined to put a stop to that sort of thing, and as this was a very bad case they must each pay £15, including costs, or two months' imprisonment in default. Application for time was asked for, but the Clerk (Mr. J. T. Belk) said he could not allow any time for payment. A similar charge against a butcher named Robert Russell was adjourned for a fortnight. As the fines were not paid, both butchers were sent to gaol.

HOLLAND COUNTY COUNCIL AND THE FOOD AND DRUGS ACTS.

COUNTY ANALYST'S REPORT.

The report of the County Analyst (Mr. C. H. Southwell, Ph. D., F.R.M.S., Public Analyst), showed that seven samples of milk, two of whisky, one of brandy, two of sweets, and four of mustard had been submitted and found unadulterated. One sample of mustard was adulterated with not less than 19 per cent. of wheaten flour and a small quantity of turmeric. The total number of samples analysed during the quarter was 17, adulterated, one. The County Analyst appended the following observations: "With regard to the samples of milk submitted for analyses, three were exceptionally poor, even to the low, and in my opinion unsatisfactory standard, apparently adopted by the appeal authorities. For comparison I obtained two samples of genuine milk from cows grazed in a poor pasture, one of which had fourteen pounds of bran daily, and the other four pounds of linseed cake daily. In the former case (although considered the better cow) the milk was deficient in cream: the cake-assisted cow gave fair average milk. I am of opinion that cows should be properly fed, so that milk may be of a quality capable of well sustaining infantile life, and that a poor season should not be legally accepted as an excuse for poor milk." Councillor Atton said that he had looked very carefully through the report, and found there was a diminution in the adulteration of the various commodities sold in the county, so far as could be learned. He wished to know whether it was possible to prosecute the manufacturers of an adulterated article as well as those who sold it retail. In many cases the punishment came upon small tradesmen, when the larger wholesale tradesman or the manufacturer was really to blame. The Clerk said they had the power to proceed against the person from whom the article was purchased. He was not sure the Act went beyond that. Councillor Mullington said that under the new Act the prosecutors could proceed against the manufacturer as well as the dealer, and the dealer, as proceeded against under this Act, if he bought it in a *bona fide* manner from the manufacturer as an article stated to be of such and such worth, could, on being prosecuted, immediately disclose the source from which he got it, and it was within the power of the Council to proceed against the first source of origin. Councillor Jeffreys inquired if they could not appoint an Analyst to analyse the animal foods and articles of manure sold. Farmers were suffering a good deal from adulteration in these articles, and he thought it was only right they should have an Analyst to do this. Councillor Hall: You have one, and if you pay him he will do the work. The Chairman replied that an Act had recently been passed in the last Session enabling an Analyst for such matters to be appointed. (Hear, hear.) He (the Chairman) intended to introduce the matter to the General Purposes Committee, and their recommendation could be placed upon the agenda for the next meeting. (Hear, hear.)

CORRESPONDENCE.

To the Editor of FOOD AND SANITATION.

MALT VINEGAR: WHAT IS IT?

Sir,—Will the writer of the excellent article on vinegar, which appears in your issue of 11th inst., on page 348., kindly inform me if he considers vinegar made from rice, hydrolysed with sulphuric acid, and which has undergone the vinous and acetic fermentation, can honestly be called malt vinegar, as I know it is being sold as such by some makers.—Yours truly,
CURATOR.

POWELL'S BALSAM OF ANISEED—FOR COUGHS.

Powell's Balsam of Aniseed—Coughs and Asthma.
Powell's Balsam of Aniseed—Coughs and Bronchitis.
Powell's Balsam of Aniseed—Coughs and Hoarseness.
Powell's Balsam of Aniseed—Coughs and Lung Troubles.
Powell's Balsam of Aniseed—Coughs.—Safe and Reliable.
Powell's Balsam of Aniseed—Coughs.—Established 1824.
Powell's Balsam of Aniseed—Coughs.—Refuse Imitations.
Powell's Balsam of Aniseed—Coughs.—Sold by Chemists.
Powell's Balsam of Aniseed—Coughs, Night Cough, Influenza.
Powell's Balsam of Aniseed—Coughs Relieved Instantly.
Powell's Balsam of Aniseed—Coughs.—The Oldest Remedy.
Powell's Balsam of Aniseed—Coughs.—Trade Mark.
Powell's Balsam of Aniseed—Lion, Net, and Mouse.
Powell's Balsam of Aniseed—1s. 1½d., 2s. 3d.

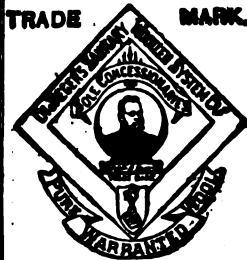
GUARANTEED ABSOLUTELY PURE.

Warranted to stand any Analytical test A natural product ensuring perfect digestion not possible in the various manufactured Acetic compounds

SICILIAN WINE VINEGAR.
Can be supplied in bulk.
Write for Samples and Price to Sole Proprietors:—
72, Mark Lane, London, E.C.
READ & DIGHT.

TESTED FOR PURITY NON-SHRINKING AND STRENGTH

Protection from Chill in all Climates.



JAEGER PURE WOOL CLOTHING.

*The Best is the Cheapest!
Fixed, moderate prices for first quality.*

The "JAEGER" Goods are tested for Purity in the Company's own Laboratory and Guaranteed by this Trade Mark, without which none are genuine.

Dr. Jaeger's "Health Culture," and Jaeger Company's Price List, sent free on application.

WEST-END JAEGER DEPOTS:

8 & 4, PRINCES STREET, CAVENDISH SQUARE (near Regent Circus).
126, REGENT STREET (near the Quadrant).
80, SLOANE STREET (adjoining McPherson's Gymnasium).
458, STRAND (near Trafalgar Square).

CITY JAEGER DEPOTS:

85 and 86, CHEAPSIDE (near King Street).
168, FENCHURCH STREET (near Lime Street).
43 and 45, FINE STREET (near Moorgate Street Station).

GRIMBLE'S MALT VINEGAR

Guaranteed BREWED and free from ANY ADDED ACIDS.

GRIMBLE & Co., Limited, Cumberland Market, London, N.W.



Use 4 ozs. to 280 lbs. Flour, second turn in winter.

For doughing direct, and other methods of working, address—

W. HEPWORTH, Harwich, Essex.

Most powerful Yeast known.

SUPERIOR FLAVOUR. LONGEST KEEPING.

Highest Awards, Healtheries, London, 1884.

LONDON, 1893 (this Year).

LARGEST YEAST WORKS IN THE WORLD.

Chafed Skin, Piles, Sores, Chilblains, Chapped Hands, Neuralgic, and Rheumatic Pains, Sore Eyes, Ear-ache, Cuts, Sunburn, Insect Bites or Stings, Throat Colds, and Skin Affections quickly relieved by use of

CALVERT'S CARBOLIC OINTMENT,

Large Pots, 13d. each, with full Instructions.

Court Circular says: "We cannot too highly recommend Calvert's Ointment. It is the best general Ointment with which we are familiar, and ought to be a stock remedy in every household."

Private report from Limassol Cyprus: "I have never found anything to come up to it for neuralgic and Rheumatic Pains."

Samples sent Free by Post on receipt of value.

F. C. CALVERT & CO., MANCHESTER.

Awarded 60 Gold and Silver Medals and Diplomas.

TRUE RECIPROCITY!

OR HOW TO MAKE HAPPY ENGLISH HOMES.

If all the Smokers of American Manufactured Cigarettes were to smoke our

"SILVER VEIL,"

or other English Brand, employment would be afforded to Thousands of respectable and deserving English Girls, besides a large amount of additional adult labor.

Why support the product of a country which brags of its McKinley Tariff Bill, introduced to devastate English manufactures.

Why not, rather, smoke Cigarettes made out of precisely the same Tobacco, but rolled in English Factories by English Girls, and pay back in its own coin Grab-all Yankeeism.

COGNAC FACTORIES LIVERPOOL

Food and Sanitation.

SATURDAY, DECEMBER 2, 1893.

HOW LONDONERS ARE SWINDLED OF £890,000 PER YEAR BY MILK ADULTERATION.

The percentage of milk adulteration in samples officially taken for analysis is, according to the Local Government Board, 13·4 per cent: i.e., in round figures nearly one-eighth of the milk supply of the country is provedly fraudulent. This represents the colossal sum of £445,000 per year filched from the public, but despite what the Local Government Board may say in proof of the 13·4 per cent. their figures do not truly represent the per centage of milk adulteration. When we remember that the adulteration Acts are a dead letter in so many parts of England, that fraudulent milk vendors know the Inspectors and keep a genuine sample for them—that the Somerset House standard is unscientific and encouraging of fraud, and that far too few samples are taken for analysis to obtain really reliable data as to the per centage of adulteration or to effectually cope with the practice of imposition in this article of food, those who have studied this class of fraud place, with reason, the per centage of milk adulteration, at a much higher figure than the Local Government Board state it, and estimate that twenty-six per cent. would be much nearer the actual figures. To root out the fraud, more stringent laws, a scientific standard, and the taking of a far greater number of samples than are at present analysed, are necessary. Until the period arrives of a compulsory Adulteration Act, enforced by trained, ununiformed travelling Inspectors, taking at least one sample per 250 of the population, and directed by a department having competent experts at its head, with a real scientific court of reference for cases of dispute, the only way to afford the public protection against fraud, is to inflict the largest penalties the law permits.

Our columns have shown times over, that even the £20 penalty is no deterrent, as witness the following:—

MR. WILLIAM BROWN AGAIN.

On November 23rd, at North London, William Brown, trading as the "Farmers' Direct Supply Company," of South-grove, Mile-end-road, was summoned for selling on Sunday, November 5, milk from which 50 per cent. of the original fat had been abstracted. Mr. Lewis prosecuted for the Islington Vestry, and Mr. Philcox defended. Mr. Frederick Mitchener, Sanitary Inspector, Islington, said that on Sunday, November 5, he was at his own house in Charles-street, when he saw one of the defendant's men outside with a hand-barrow which contained a churn of milk. The man was shouting "New milk 3d. per quart." Witness went out and purchased a pint, and when he informed the man that it would be sent to the public Analyst, he replied, "You know it is skimmed milk." For the defence, it was alleged that the man was calling out "Skimmed milk 3d. per quart," and that engraved on a brass plate on the hand-can were the words "partly skimmed milk," while on the centre of the barrow was the same statement. The Inspector, however, denied that any statement was made to him before the purchase. Mr. Philcox said the defendant was at the mercy of his men. He

the evidence, mentioned that this prosecution had been instituted at the direction of the Home Secretary. *The defendant had been convicted 19 times at 12 different police-courts, and fines amounting to a total of £250 had been imposed.* Mr. Fenwick fined the defendant the full penalty of £20, with £1 1s. costs, or one month in default. Defendant: Will you give me till to-morrow to get the money? Mr. Fenwick: No.

Until our journal came into existence, and Mr. Brown's appearances at Court were recorded for the benefit of dairymen, Inspectors, and the public, this offender got off repeatedly with penalties of a sovereign or two. It is obvious that such penalties were no deterrent, seeing that Mr. Brown has been fined £20 several times within the past few weeks, and still continued the practice. With actual proof before them of the fact that milk vendors practising Mr. Brown's game can recoup themselves of a fine of £20 and costs by one or two days sale of the adulterated milk, what can the public and honest dairymen think of the Magistrates who inflict 2s. 6d. to 10s. penalties?

From a batch of milk cases now before us we find the Brentford Magistrates consider 20s. a sufficient fine for any degree of milk adulteration. We do not for one moment suppose that the Magistrates guilty of these travesties of justice sin from want of heart—we think it is from want of knowledge of the serious nature of the offence of milk adulteration. We have said we do not believe in the reliability of the Local Government Board's figures as to the percentage of milk adulteration. Our belief finds curious corroboration in the remarks of that able Public Analyst, Mr. C. E. Cassal, who in his last report to the Kensington Vestry says, that nearly "10 per cent. of the samples of milk analysed during the year were inferior," i.e., *they had been purposely prepared so as to be deficient in fat, but only to such an extent as to make it impossible for a Public Analyst to condemn them as adulterated, on account of the fact that Somerset House—that monstrously ignorant Court of Appeal—would proclaim them genuine.* We have thus a Government department deliberately fostering adulteration in at least one parish in London of 10 per cent. over the Local Government Board's figures. In defence of the Somerset House standard it is invariably urged that were it raised, much hardship would be certain to be inflicted upon honest vendors. *The Cowkeeper and Dairymen's Journal*, which may claim to voice the feelings of dairymen on this question, flatly contradicts the assertion. In the November number it says:—

"Public Analysts have done good work in this last ten years, great progress has been made in the scientific analysis of food, and especially in milk, and the great experience they have had as milk Analysts leaves no doubt whatever about the reliability of milk analysis, and though they do not say whether it is added water or natural water, they know for a certainty when milk is reduced, and we have constant proof of this by the admissions made by the farmers themselves who explain how the affair happened. But if the Committee of the Chester Farmers' Club have no confidence in the Public Analyst, they should do as we have done many times, *test them*; they could not spend their funds to a better purpose than protecting their members from an incapable Analyst. Our Chester friends are sorely troubled about the standards and the fluctuations in the quality of milk. I do not think they need let this trouble them. No man has ever got into trouble from this source; the standard taken covers all fluctuations. I do not mean from one or two cows, but from a dairy of cows, that is to say, from eighteen to twenty-five."

Mr. J. Carter Bell, Cheshire County Analyst, gives also the following proofs that the Somerset House standard puts before the milk vendor the alternative of being dishonest, or, in a commercial sense, foolish. Mr. Bell says:—

"Some of the farmers of Cheshire have had a meeting to complain about the analyses and standards of milk, and to memorialise the authorities of Somerset House to lower the standard of milk. In the first place, those gentlemen have no power to fix a standard, and in the second, the standard generally adopted by the Society of Public Analysts is so low, that no dairy of well fed cows could yield a milk of so poor a quality. I have visited many farms in Cheshire and Lancashire, and have had hundreds of cows milked in my presence, and have rarely found an abnormal sample of milk. The farmers of Cheshire may feel perfectly safe that no prosecution could ever take place in the county for naturally poor milk, as it has been my custom for nearly twenty years to follow up poor cases of milk to their source, and only in one instance do I remember a case which did not come up to a very low standard. In this particular instance, when I found that the milk was so poor, I asked the Inspector to obtain a sample direct from the cows which corresponded with number one. I then visited the farm myself, and found five half starved cows, which were nothing more than animated bundles of bones. The cows were milked in my presence, and the analysis of the milk again corresponded with number one. It must be perfectly patent to all that the milk supply of the United Kingdom is not to be brought down to correspond with such samples as I have named. From the hundreds of samples I have seen taken from the cows myself, and which I have analysed, I find the average composition of the Cheshire milk to be:—Total solids, 13.82; solids not fat, 9.31; fat, 4.01. It will be interesting to compare this with a report made by a chemist to one of the large London dairies upon the milk supplied during the last twelve years, which represents over 120,000 samples. The average composition of this large number of

milks is:—Total solids, 12.9; solids not fat, 8.8; fat, 4.1. These figures plainly prove that the standard is too low instead of being too high."

The above facts, therefore, clearly prove that instead of the percentage of milk adulteration being 13.4 as the Local Government Board state, it is more likely to be twice that amount. We have to this extent examined the question of milk adulteration in order that our readers may gain some idea of what Somerset House unscientific standards cost the people of England. The milk of Manchester was in 1886 made the subject of official enquiry, when it was found that for a population of 373,000 the value of the milk consumed was, calculated at 3½d. per quart, £310,997. Thirteen per cent. adulteration reckoned on this amount would show a sum of over £40,000, of which the public would be defrauded were even 13 per cent adulteration permitted in Manchester.

In London, 13 per cent. would represent a total robbery from the public by milk adulteration of over £445,000 per annum. As the percentage of milk adulteration in London is, however, at least twice this amount, we have the fact before us that the inhabitants of London are swindled of £890,000 per year in milk adulteration alone, i.e., assuming the consumption of milk per head in London to be the same as that in Manchester. In the face of facts like these, it seems astounding that the Local Government Board or the Home Office do not take steps to point out to Magistrates how gravely they offend against public honesty and public health by the infliction of penalties such as those enumerated above, for it should be always remembered that as milk forms the staple food of infants, the tampering with its purity is one of the meanest, and, as regards public health, worst forms of fraud. How many rickety, puny, starveling children these figures account for no calculations can tell us.

THE BISHOP AND THE BREWER.

A correspondence of the "bluffing" character to which we have become accustomed from brewers' advocates, has been published in the *Standard* of November 27th, as having taken place between Mr. E. N. Buxton, of the Brewery, Spitalfields, on behalf of the brewers, and the Bishop of London. Upon the strength of quibbling statements distorted to prove what they were obviously never intended to prove, Mr. Buxton taxes the Bishop of London with having made a grave charge against brewers, and alleges that they do not adulterate their beer. We are tired of pointing out how dishonest the class of reasoning is in which Mr. E. N. Buxton indulges.

He makes Sir William Harcourt on March 10th of this year, state, in reply to a question in the house of Commons that there were 2,044 samples of beer analysed for the detection of adulteration during the past financial year, but that in no case was the existence of noxious ingredients found. Mr. A. Milner, Chairman of the Inland Revenue Department—a department to whose pestilential ignorance we have unhappily so often had occasion to refer to, and which by the said ignorance and incapacity causes loss to traders and the public of England, Ireland, Scotland and Wales, of millions of money per year—has the impertinence to say: "I am informed that the experience of our laboratory for a number of years goes to show that there is *practically no adulteration of the beer of commerce with substances usually considered deleterious to health.*"

We would again point out to Mr. Buxton, and to those who, with him, have been trying for so long, and so industriously, to throw dust in the eyes of the public, that the charges made against the brewers are not that they put noxious or poisonous ingredients into their beer. With all our contempt for the methods of the modern brewer, we do not suppose that he is fool enough to put into his beer ingredients which would at once kill his customers and his trade. Nor are we disposed to accept as worthy of one moment's credence any statement emanating from authorities so discredited scientifically as the Inland Revenue Laboratory. We prefer to take the evidence of real scientists. That evidence reveals—and the brewers themselves have no option but to admit it—that thanks to Mr. Gladstone's truckling to the brewers (who as a class seem for years to have had legislation made for them exactly as they wanted it) the public no longer have the opportunity, save in very few instances, of purchasing a genuine unadulterated beer.

We take our stand with the whole scientific world—excepting always those interested brewers' chemists whose business it is, at the instigation of their employers, to swear that black is white—that malt and hops are the materials from which beer should be brewed, and that beer made from any of the trash that is now used for its manufacture has no more right to be called beer than dilute pyroligneous acid has to be called vinegar. But, thanks to the Inland Revenue Department and to Mr. Gladstone's injury to English agriculture by the abolition of the malt tax, it is as difficult for an Englishman to obtain a glass of honest English ale made from malt and hops in England, as it is to find any honest reasoning in Mr. E. N. Buxton's letter. We

must dismiss the statement of the Inland Revenue Department, because it is a tainted and discredited authority. We can only take the statements of impartial authorities concerned with the enforcement of the adulteration Acts. What one of the most eminent of these authorities says, is this: "Owing to the Excise Authorities" (that is, to Mr. A. Milner and his associates at Somerset House), "the present state of the regulations concerning beer is utterly deplorable. For fiscal purposes, one substance after another has been allowed to be put into beer. There is no need to have malt or to use hops. There is no regulation as to the minimum of strength. You can add as much salt as you like, and injurious preservatives in any amount to counteract the effects of bad brewing. In fact, beer at present, thanks to Somerset House, may be any alcoholic decoction which the ingenuity and dishonesty of a brewer may suggest, and if a Public Analyst takes proceedings against an utterly bad sample, he is met in Court by interested brewers' chemists, who swear that all is as it ought to be, and *Somerset House appears, with all its official weight, and defends anything and everything.* As a Public Analyst, I am frequently called upon to analyse beer for the various authorities under which I act, but I have invariably to report that, according to Excise regulations, such samples are genuine. My authorities, who know in many cases that the samples *sent me are* of vile quality, no doubt think that they have either a fool or an incompetent chemist as a Public Analyst."

In the face of facts like these, we have no hesitation in saying that a more impertinent and unwarranted statement than that made by Mr. E. N. Buxton—that beers are not adulterated—it would be hard to discover. Neither Mr. Buxton nor any other interested brewers' advocate can deny the fact, that the public who ask for beer expect to get the product of malt and hops. They are sold the product of entirely different articles. Had it not been for the fact that the Excise Authorities have made these shameful regulations in the interests of swindling brewers, prosecutions for beer adulteration could take place, and would take place in thousands of places throughout the length and breadth of this country. Clause 6 of the Food and Drugs Act, 1875, says: "No person shall sell to the prejudice of the purchaser any article of food or any drug which is not of the nature, substance, and quality demanded by such purchaser." We maintain that no truthful man can allege that a purchaser who asks for a glass of beer, and receives swipes made from sugar, rice, chiretta, and whatnot—or even, for aught the brewer cares—or the Food and Drugs Act can punish, made from road-sweepings, is other than prejudiced, and that such beer is other than adulterated. But the Adulteration Act has been designedly throttled in the interests of the swindling brewer. That this is so is not only shameful to the brewers themselves, but to Mr. Gladstone and all concerned with the Act, by which beer has been reduced in England to this adulterated condition.

In addition to being fraudulent to the purchaser, the opportunities given by the Inland Revenue minutes for the sale of such beer has inflicted one of the gravest injuries ever done to English barley growing. Within ten years, since the repeal of the Malt Tax, land under barley crops has decreased by 500,000 acres, throwing many thousands of labourers out of employment, whilst sugar, which we do not grow, has increased in breweries and distilleries by 500,000 cwt. within the same period. This is not only an object lesson in public plunder in the interests of a class, it is more than that—it is eloquence itself as to the causes why starvation and misery afflict the vast mass of hopeless beings who now swell the ranks of our unemployed, and why English agriculture is every day going into a more ruinous state.

If Mr. Buxton wishes to argue this question with the Bishop of London, he ought to argue it on facts, not upon Jesuitical quibbles, backed up by statements from persons like Sir William Vernon Harcourt and Mr. A. Milner, who know nothing whatever scientifically about the question, and to all intents and purposes care less.

A TECHNICALITY IN ADULTERATION LAW.—At Brentford Police court, on November 25th, J. Martin and Son, of Brookley-park Farm, Brookley, milk contractors to the London County Council at Hanwell Asylum, were summoned by the Southall-Norwood Local Board for having sold milk at the asylum which on analysis had been found to have been adulterated with five per cent. of added water. Mr. A. L. Houlder appeared for the Local Board, and Mr. Ricketts appeared for the defendants. The steward at the asylum, not being satisfied that the milk was up to the standard required by the contract, brought the matter to the knowledge of Inspector Tidy, an official of the board, who on the 27th of October attended at the asylum and took samples from two cans being delivered by the defendants' carman. These were sent to the Analyst, who certified that the adulteration in each was to the extent of five per cent. Mr. Ricketts objected to the certificate as not being in compliance with the Act. The Analyst had not stated his address, as the Act required he should, and the statute, being penal, must be strictly construed. Mr. Houlder argued that the address was no material part of the certificate, but the Bench ruled the objection fatal, and dismissed the summons.

PUBLIC MARKET FRAUDS.

The extent to which adulteration is practised in markets under the control of Corporations is well known to all who have a personal acquaintance with the character of the goods sold to the public in the Manchester Corporation Markets. But, somehow, the margarine that is palmed off upon the public as butter in quantities so great that many of the dealers in the Manchester Corporation Markets make as much as £20 per week of extra profit out of this article alone, never gets into the hands of the Inspectors of Food and Drugs when they visit the markets. This is doubtless owing to the fact, which we have so often commented upon in our columns, that the present position of the Food and Drugs Inspector is a ridiculous one, and seems designed to interfere with the suppression of adulteration. At present, the officials collecting samples under the Food and Drugs Acts are thoroughly well known to the vendors who pursue these fraudulent practices. When, as in many cases, those concerned with the collection of samples have the additional disadvantage of having to make their purchases when in uniform, the vendor knows perfectly well for what purpose the sample is being obtained, and takes special care that the Inspector receives a genuine one.

There is too much reason to fear that the condition of the Manchester Corporation's markets in this respect is the same in well-nigh all the markets throughout the country that are under Corporation management. For example, at Wigan, on Monday, the 27th ult., a Mr. John Pope, a provision dealer of the Market Hall, was charged by Inspector Sumner with selling margarine as butter, for which the price of 1s. per pound was charged. Mr. Sumner had purchased it through an agent, or it is very unlikely that the result which he obtained would have been got. The sample was first of all wrapped in vegetable parchment paper, perfectly plain, without any printing whatever to indicate it was margarine, and a piece of newspaper—a portion of the *Belfast News Letter* of March 16th was wrapped around it, on the margin of which there was a small mark of the word "margarine." The defendant was fined 40s. and costs, and had the impertinence to say, "I am very much obliged to you, gentlemen; you are giving a verdict against all shopkeepers and grocers in the town." We should be very sorry if this libel upon the rectitude and integrity of the grocers of Wigan had one particle of foundation.

That the practice at this market of thus vending margarine as butter was not confined to Mr. Pope, appears from a further case in which Mr. Edward Williams, senior, provision dealer at Hall-gate, and Market-hall, Wigan, was charged 1st, with selling a quantity of margarine without placing it inside a labelled wrapper; 2nd, that he sold as butter a substance wholly consisting of margarine; and 3rd, that he exposed for sale in his shop a quantity of margarine which was not labelled as such. Convictions had been obtained against this dealer on previous occasions. In this instance, he had sold the margarine as shilling butter. The defendant did an immense business, selling at least a ton every week, and if he sold excellent margarine, which would cost 60s. per cwt., the surreptitious profit upon the amount, if sold as butter, would amount to between £50 and £60 per week. The Magistrates were asked to impose the maximum penalty under the Margarine Act of £100 in connection with the first charge, but after hearing evidence, they determined to fine him £5 and costs for the first offence, for the second, £20 and costs, and for the third, £20 and costs. We hold that such fines are no deterrent against a practice yielding profits like those instanced.

Inspector Sumner deserves the best thanks of the grocers of Wigan for having taken the steps he has to suppress these practices, and to give fair play to grocers who sell genuine articles under their proper designations, and we trust his example will not be lost upon the Food and Drugs Act Inspectors in other towns where there are Corporation markets. They have been too long neglected.

FOOD AND DRUGS ACT INSPECTORS' QUERIES.

To the EDITOR of "FOOD AND SANITATION."

DEAR SIR,—In taking a sample of milk from a vendor the other day, he admitted putting water into two churns of milk which were standing by the side of the road in two handcarts ready for the round. He reluctantly sold me a pint from one churn; but as I had found him out in several untruths, I purchased a sample from each churn, and a hand-can which he had with him as well.

If the Analyst reports each to be adulterated, can I take out three summons, or will it be considered one offence?

The vendor above referred to has been twice previously convicted, and on each occasion admitted the adulteration; you will, therefore, agree with me that any penalty imposed will be justly deserved.

A reply in your next issue will greatly oblige.

Yours faithfully,

J. H. C.

Reply.—You can take out a summons for each offence. See the case of John Bertram and Co., Earl's-court Exhibition, reported p. 307, Oct. 14th number: "Food and Sanitation, in which penalties were inflicted against Messrs. Bertram for three offences upon all fours with those you detail.—Ed.

REASONS FOR A RE-INVESTIGATION OF THE MAYBRICK CASE.

Upon the question of Mrs. Maybrick's guilt or innocence we have an absolutely open mind; it was therefore with no intention of reopening the case that we directed attention to the fact that, at the period of James Maybrick's death, commercial glycerine on sale in this country contained larger percentages of arsenic than were actually discovered to be present in the body of Mr. Maybrick. Commercial Analysts, who occupied themselves at that period with the analysis of glycerine, as well as the chemical journals of the period, amply prove the truth of this.

What we were concerned to show was, that Mr. Maybrick, being given Valentine's Meat Juice as a food and stimulant, was given a preparation containing so small a percentage of nutriment as to be practically useless, and to warn amateur practitioners, like Mr. Edwin Maybrick, as well as the medical profession, against believing that high-sounding testimonials and high prices are proof-sufficient of the excellence of a meat extract.

So much correspondence, however, has poured in upon us with relation to this question, and some of so interesting a character, and calculated also to throw such grave doubts upon the justice of Mrs. Maybrick's condemnation, that we cannot refrain from giving them to the public. One correspondent says:—

SIR,—Sir James Poole, ex-mayor of Liverpool, swore on oath that he met James Maybrick six months before his death and asked him if it was true that he was an arsenic eater. Maybrick's reply was, "What the — has that got to do with you? I can eat what I like." Sir James Poole said, "I took him to the Constitutional Club and asked him for God's sake to drop the habit." His reply was, "I cannot. It is second nature to me." The medical man who managed the Insurance Association in which James Maybrick was insured for £2,000 and £1,000 was called upon by James Maybrick at his office, North John-street, Liverpool, nine or ten months before Maybrick's death, upon which occasion Maybrick desired an extension of the policy for another £1,000. This gentleman, Dr. Caldwell, knowing, as a medical man, the extent and the symptoms of arsenic eating, accused Maybrick of being an arsenic eater, and declined to extend his policy unless he abandoned the habit, saying, "Drop that habit and come to me six months after you have done so and I shall be pleased to extend your policy then." Mr. Maybrick admitted such was the case, but said he could not abandon arsenic eating.

This was sworn in an affidavit, and was on the brief of Sir Charles Russell, but extraordinary to say, Sir Charles Russell did not call this witness. Mr. Heaton, a chemist, carrying on business in Exchange-street West, swore that he was in the habit of preparing a pick-me-up for James Maybrick, in which arsenic was an important ingredient; that he had often remonstrated with Maybrick against the use of this particular ingredient, but Maybrick's reply was that since his residence in America he had been subject to malarial fits, and that this was a preparation that had been prescribed for him whilst in America.

Some twelve months before the death of James Maybrick, Mrs. Maybrick wrote a letter to his brother, Michael Maybrick, that James was not well, and that, although they were not friends, she would be glad if Michael would visit her house, as she had something important to communicate. He came, and in the presence of Mr. Steele, solicitor, who resided next door, she told Michael Maybrick that her husband was in the habit of taking a noxious compound, a white powder. What it was she did not know, but she would be glad if Michael would speak to James about it, as her influence was unavailing, and she believed it was injuring James. At the police-court trial the defence elicited the fact from Michael Maybrick that this conversation took place, and that in consequence Michael spoke to James, but received an unsatisfactory reply. Some few days before Maybrick's death, Mrs. Maybrick took a further step. To the Garston physician, who attended James Maybrick, she complained that her husband was in the habit of taking a white powder, which she thought might be *nux vomica*, and thought he, as the physician, should be aware of the fact. The doctor thanked her, and went to James Maybrick's room. He said to Mr. Maybrick, "I am informed that you are in the habit of taking *nux vomica*; is this true?" Maybrick's reply was, "Do you think I am a fool?" The physician, at the police-court examination, admitted that the symptoms Maybrick suffered from were similar to those of arsenical poisoning, but that Mrs. Maybrick's conversation did not lead him to suppose that arsenic was the drug she referred to.

At the post-mortem examination it was found that the remains of James Maybrick did not contain more than one-tenth of a grain of arsenic, which quantity, you have said, was not sufficient to poison a child. The question, therefore, is simply, what did James Maybrick die of? Was it of arsenical poisoning, by poison administered by this wife? Or had his constitution become so used to the abuse of arsenic that he died for the want of it? Or,

as all foods that were nourishing appeared to have been taken away from him in order that Valentine's Meat Juice might be given to him by the amateur prescriber, Mr. Edwin Maybrick, who had apparently taken the conduct of his illness out of not only his wife's hands, but his medical attendant's also, did he die of malnutrition?

I may, also, comment upon the erratic nature of the summing up of Sir James Fitzjames Stephen, the judge who tried the case. The infirmities deplored alike by all who admire his brilliant intellect were, in my opinion, as much in evidence in the Maybrick case as upon any subsequent period. On the first day his summing up was strongly in the woman's favour; on the second day his mind appeared to view the trial from an entirely different standpoint. Ferocious to an extent that astounded the entire Bar, he turned dead against the prisoner, the only explanation for which was, that he, a misogynist, who had tried to obtain a divorce from his wife and failed to do so, was swayed only by two passions—his hatred of women and of adultery.

I, at least, believe that his second day's summing up was devoted to, not impartially laying before the jury any facts that would convict the woman of murder, but to such an arrangement of them, and of the woman's adultery, as would lead the jury—which was by no means a strongly intellectual one—to find the prisoner guilty. And in that finding there is not a shadow of doubt that the jury were entirely swayed by the judge.

In view of the fact which you have made public in regard to James Maybrick's food and his poisons, justice demands that the woman's case should be re-investigated. Sir Charles Russell, above all men, is bound in honour to support a plea for such re-investigation.

Whether the above statements be entirely accurate, or partially so, we are not able to say, but in the light of our own discoveries, that at the period of James Maybrick's death there was very little glycerine on sale in England that did not contain large percentages of arsenic—some more than sufficient to account for the amount present in the Maybrick post-mortem—and of the further fact that the "food" given to James Maybrick was one which contained practically no nutriment whatever, a doubt—and that of the very gravest kind—is raised as to the justice of the verdict in the case. Mrs. Maybrick may be a victim of circumstantial evidence, which scientific investigation, undertaken, even at this late stage, may prove to have contributed to fasten a terrible and undeserved guilt upon her. Whether she be guilty or not guilty of the death of James Maybrick, for which she is now suffering a fearful punishment as a life convict, we think, has not been in the light of the facts we have here given—sufficiently proved.

In the interests of the whole mass of the public, who, by the prevalence of unsuspected and uninterfered with drug adulterations, may be, by circumstantial evidence, at any moment liable to the suspicion of having committed crimes as grave as that for which Mrs. Maybrick is now suffering imprisonment, a re-investigation of this case appears to be absolutely necessary. If such a re-investigation should lead to some real steps being taken to discover the extent to which the adulteration of drugs is practised in England, and to suppress the same, then such an enquiry would be productive of the greatest benefits to the entire community. What those benefits would be can only be adequately realised by the mass of the medical profession who, at the present moment, however great their skill, however accurate their diagnosis, and however earnest be their watchfulness to bring the sufferer out of the jaws of death, find all their care and anxiety and knowledge frustrated by the fact that by dangerous and deadly adulteration the very medicine that, should bring the sufferer back from the grave, thrusts him into it.

This question of re-investigating the case of Mrs. Maybrick involves considerations of far greater importance to the public than would be apparent on a cursory examination. It raises the whole question of drug adulteration. There is no adulteration so deadly as drug adulteration, and there is none practised with greater impunity, or fraught with as grave consequences to every person. Yet the samples of drugs taken for analysis are infinitesimal in comparison with the importance of the purity of the drugs themselves. For example, Glauber's Salts have rarely been analysed, but Sir Charles A. Cameron, the Public Analyst of Dublin, chanced some time ago to make an analysis of a large parcel of Glauber's Salts, in which he found that there was no less than eight grains of arsenious acid present in each pound. Sir Charles A. Cameron said: "Suppose that a corresponding make of the compound were to be freely taken. Some persons are in the habit of taking from 1 ounce to 1½ ounces of salts every morning before breakfast. Assessing this at 1 ounce, it would mean that they were swallowing 15 grains of white arsenic in the course of a calendar month—always supposing that they managed to live to the end of the month."

Another correspondent informs us that the total quantity of arsenic discovered in the post-mortem upon James Maybrick was less than one-third of a grain, being only one tenth of a

grain. This would be scarcely sufficient to poison the tiniest animal, not to speak of a grown-up man. The discovery we record above, made by Sir Charles A. Cameron, raises so important an issue that our readers will pardon us if we carry his supposition a little further. It would be the easiest thing in the world for salts, containing poison in the large proportion instanced above by Sir Charles A. Cameron, to be administered innocently by any person. Given another Mrs. Maybrick—an unhappy home, a faithless wife, and suspicion hovering over her—everything tending to suggest that it was to her interest to get rid of her husband, and that husband were to die from such a dose of salts, thus innocently administered, the discovery in the post-mortem of the quantity of arsenic that is here revealed in Sir C. A. Cameron's analysis of these, supposedly innocent, Glauber salts would, as certain as the night follows day, consign that woman either to the gallows or to life-long imprisonment—for no one would dream that the amount of arsenic in the salts in question might have been naturally or accidentally present. The question of making a separate purchase of the salts from the chemist who supplied them, and analysing the same separately would be the last likely thing to suggest itself to anyone concerned with the defence.

These are not chimeras of the imagination or bogus confessions of the W. T. Stead order, but they are hard scientific facts to which the analytical records of every chemist's laboratory can testify. We do not need to emphasize the terrible dangers to which unsuspected and uninterfered with drug adulteration exposes the public. If the facts we have here given should lead to a re-investigation into the Maybrick case, and to a revision of the pharmacopoeia, so that it becomes possible to suppress drug adulteration and to rigorously guard against the accidental administration of poisons, such a re-investigation will confer a lasting benefit upon science, and a protection to the public at large. As matters now stand, medical men have long recognised how well-nigh impossible it is to be certain that the drugs they prescribe are of absolute purity and proper strength; hence, the most cautious insist upon prescriptions being prepared by certain chemists, on whose care they can place implicit reliance, or, failing that, prepare them themselves. There is no possibility of knowing how many patients have been thrust into the grave, and how many of the ablest physicians have found their best skill powerless, owing to the fact that the very medicine which should relieve the sick man and restore him to health, carries within it an unsuspected poison.

ENCOURAGING FRAUD.

At Dublin, Nov. 21st, John Crosby, contractor to the South Dublin Union, fined £2 for sending milk to the paupers adulterated with 16 per cent. added water.

At Coventry, on the 20th November, Joseph Warden, Radford, was summoned by Mr. W. H. Clarke, City Inspector, for supplying *Skimmed Milk* to the Coventry Union Workhouse that contained 18 per cent. of added water. *Pure skimmed milk* is not a diet we would recommend for paupers, and we confess to feeling on reading this case that we would like to put his Worship the Mayor, and the Alderman, etc., who assisted him in trying the case in the place of the paupers, and feed these Magistrates for a while on milk deprived of its fat, and having 18 per cent. of water added to it, because although Mr. Joseph Warden, of the Spring, Radford, admitted in cross-examination that he was fined 20s. and costs in 1889 for milk adulteration, and in 1892 £5 and costs for adulteration of milk supplied to the workhouse, the mayor (Alderman G. Singer), Ald. C. J. Hill, Ald. Maycock, and Mr. T. G. Beamish fined him the absurd sum of £3 19s. 6d., which included Analysts' fee and costs. As he supplied 135 gallons of skim milk per week to the workhouse, such a penalty is an absolute encouragement to the perpetration of roguery. The above, however, shine resplendent by comparison with the following culled from decisions by Mr. Stewart, Stipendiary of Liverpool, given on November 22nd: "John Lloyd, 28, Agate-street, was summoned for selling two separate pennyworths of skim milk to Inspector Baker, which on analysis were found to be watered to the extent of 4 and 7 per cent. respectively. Defendant had been fined 10s. and costs in February, 1892. Mr. Stewart imposed penalties of 1s. and 15s. costs in the first case, and 20s. and costs in the second.

Thomas Thwaites, milk-dealer, 13, Tullock-street, was fined 10s. and costs for selling as skim milk what on analysis was found to be adulterated with water to the extent of upward of seven parts to every hundred parts of milk.

James Newton, milk dealer, was summoned for selling adulterated milk. Inspector Baker stated that on the 27th ult. he saw the de-

fendant's milk float outside the Lying-in Hospital, Brownlow-hill. He asked for a pennyworth of skim milk, which he received and paid for. On analysis it was found to contain 14 parts of water to every hundred of the poorest milk. Mr. Entwistle, for the defence, stated that the defendant had only a small quantity of milk in his cart at the time, and that was intended for one of his customers. There was an understanding between the two that if the defendant had no skim milk he should water the new milk and send it instead. The customer in question, named Owens, then gave evidence, bearing out Mr. Entwistle's statement. Questioned by Mr. Stewart as to what he used the milk for, defendant replied that it was used for puddings. He was quite content to receive milk which had been watered 14 per cent. The Stipendiary said he considered it a peculiar arrangement, but if the witness's evidence was to be believed, he did not think it was a case calling for a heavy fine. The defendant would have to pay 15s., the cost of the case.

These penalties are so palpably ridiculous that we are surprised to find them recorded without comment in Liverpool journals. We can only surmise that the reason is that they are so frequent as to have lost the charm of novelty and have come to be regarded as matters of course. The Liverpool County Magistrates' Court is just as farcical in respect to penalties. On November 20th it inflicted a penalty of 20s. for 38 per cent. water adulteration, and 40s. in a second case where the defendant had been previously convicted—the Magistrates trying the cases being a Mr. H. B. Gilmour and a Mr. W. H. Anderson. These are fair specimens of justices' justice everywhere.

ENFORCING THE ACTS AT BRIGHTON.

William Baker, 45, of 11, Edinburgh-road, was summoned for selling at the hands of an agent a pint of new milk alleged to have been adulterated with not less than 20 per cent. of added water on the 20th ult. The Deputy Town Clerk (Mr. Hugo Talbot) appeared in support of the information, Mr. Kerridge defending. Assistant Sanitary Inspector Ralfe said he purchased a pint of new milk, for which he paid twopence at the defendant's shop. He purchased it of a little girl named Alice Gillam. He told Mrs. Baker that he had purchased the milk for analysis. Inspector Cuckney stated that he divided the milk into three parts in the presence of Mrs. Baker, to whom he gave one sealed sample, retained one himself, and submitted one to the Analyst, whose certificate showed the milk to have been adulterated with not less than 20 per cent. of water. Mr. Kerridge called Jane Baker, wife of the defendant, who stated that she told Ralfe that she had no new milk, and that the morning's milk had not arrived. It was stated that defendant had been twice fined for a similar offence, the second fine being one of £5. The Stipendiary said if a low penalty did not prevent the sale of adulterated milk a high one must be imposed. There having been two previous convictions for a similar offence, he felt he should not be doing his duty if he did not impose the highest penalty of £20 and costs, or a month's imprisonment. Allowed a week for payment. But this is followed by a fine of the usual paltry kind.—Alfred Hart, of 10, Howard-terrace, was sued for selling milk which was adulterated with added water to the extent of not less than ten per cent. on October 22nd. The Deputy Town Clerk (Mr. Hugo Talbot) also prosecuted in this case. Defendant pleaded guilty, urging in extenuation that he sold the milk in the same condition in which he received it. He was mulcted in a fine of 10s. and costs, or the alternative of seven days' hard labour.

MESSRS. SPIERS AND POND, LIMITED, SUMMONED FOR ADULTERATION.

At Lambeth Police-court, on November 28th, Messrs. Spiers and Pond (Limited), the large restaurant keepers and purveyors, were summoned by the Camberwell Vestry for selling milk, from which 35 per cent. of the original fat had been abstracted. There was a second summons against the defendants for selling milk, from which 63 per cent. of the original fat had been abstracted.—Inspector Collins said on the 1st ult. he went into the refreshment bar of the Crystal Palace High Level Station, in company with Dr. Stevens. He called for two glasses of milk, and upon being served, told the young lady the purpose for which the milk was required. The young lady told him she was rather doubtful about the second glass being fresh.—Mr. Grain, for the defendants, said he would have several witnesses to call, and Mr. Hopkins, thereupon, directed an adjournment.

We are glad to see that at the least one London Vestry has had the courage to mete out the same justice to the colossal restaurant keepers as is given to the small vendor; and shall be curious to see the result. Co-operative stores and gigantic trading concerns have for far too long a period been unattended to by Food and Drugs Act Inspectors.

BOVRIL

CONTAINS in an EASILY DIGESTIBLE FORM the ALBUMEN and FIBRIN, the NUTRITIOUS CONSTITUENTS of PRIME OX BEEF.

Boyril Ltd., Food Specialists, London. Directors { Rt. Hon. LD. PLAYFAIR, K.C.B., LL.D.
ROBT. FARQUHARSON, M.D., M.P.,
&c., &c.

KILVERT'S LARD.**LAIDLAW v. WILLSON.**

In our issue of November 11th, we commented upon the befogged condition of the Mansfield Bench of Magistrates, who, in the face of an admission by the manufacturer, Mr. Kilvert, "at his firm were in the habit of adding, for stiffening purposes, up to 3 per cent. of beef stearine to their lard, dismissed a prosecution for adulteration upon a warranty, although the warranty had not been raised as a defence by the vendors, or by Messrs. Kilvert and Co. who fought the case on behalf of the vendors. The following correspondence respecting the purity of Messrs. Kilvert's lard has passed between Messrs. N. Kilvert and Sons, Limited, of Mark-lane, Withy Grove, Manchester, and Mr. Ralph Simey, Clerk of the Peace, Exchequer Buildings, Durham. It had its origin in the case of *Laidlaw v. Willson*, which our readers will find reported on page 330 of *FOOD AND SANITATION*, for Nov. 4th. It will be seen by this correspondence that Messrs. Boote and Edgar, solicitors to Messrs. Kilvert & Co., state that the accuracy of the report of the Mansfield case in *FOOD AND SANITATION* on November 11th, "is not only impeached by their clients, but by the Analyst witnesses." Our accuracy being thus impeached, Mr. Simey, Clerk of the Peace, Durham, has adopted the necessary course of sending the correspondence in question to us. We have, first of all, to call the attention of our readers to the jesuitical tenour of Messrs. Boote and Edgar's letters. They never come straight to the point. *They do not deny that Mr. Kilvert admitted at Mansfield that the lard contained beef stearine*, but they make the general statement that the accuracy of the report in *FOOD AND SANITATION* is "not only impeached by our clients, but by the Analyst witnesses." We do not know therefore whether Messrs. Boote and Edgar venture to assert that the report as a whole is inaccurate, that only portions of it are inaccurate, or that only that portion called attention to by Mr. Simey is inaccurate—namely, that Mr. N. Kilvert, "while also denying the presence of cotton seed oil, frankly admitted that for stiffening purposes, his firm were in the habit of adding up to 3 per cent. of beef stearine to the lard." We have to say that our report is not only perfectly accurate with respect to this statement made by Mr. N. Kilvert, and that it is impossible for either Analyst witnesses or anyone else concerned in the case to truthfully deny it, but that it is accurate as a whole. We, therefore, invite Messrs. Boote and Edgar to substantiate the allegation that the Analyst witnesses, as well as Messrs. Kilvert, impeach the accuracy of our report; or failing this, we ask Messrs. Boote and Edgar to withdraw the statement respecting *FOOD AND SANITATION* made in their communication to the Durham Clerk of the Peace. The correspondence between Mr. Simey and Messrs. Boote and Edgar is as follows:—

(Copy.)

18 & 20, Booth street, Manchester,

October 31st, 1893.

Dear Sir,—The attention of our clients, Messrs. N. Kilvert and Sons, Limited, of Mark-lane, Withy-grove, Manchester, has been drawn to the report of a case of *Laidlaw v. Willson* decided on Friday last in the Queen's Bench Division of the High Court of Justice. This case decides definitely that the wording of our clients' invoices is a sufficient warranty of the purity of their lard. Our clients have no doubt whatever as to Mr. Willson's *bona fides* in stating that the lard in question was theirs, but they equally have no doubt that lard containing 7 per cent. of beef stearine was not in fact their lard, and they accordingly did not take up the defence.

Our clients have always defended any attack upon their lard without cost to a customer, and intend to continue to do so. The case having, up to the present, been decided upon an issue other than the purity of our client's lard, they instruct us to inform you that in accordance with the spirit of their guarantee, they invite you to adopt proceedings against them, either in connection with the present case or in connection with any lard of theirs sold in your county, and they will give every assistance to the proceedings which you may think proper to adopt.—Yours truly,

BOOTE AND EDGAR.

The Clerk of the Durham County Council.

(Copy.)

Exchequer-buildings, Durham.

November 4th, 1893.

LAIDLAW v. WILLSON.

Dear Sir,—Before definitely answering your letter of 31st ult., I have to ask you to be good enough to inform me whether it is not a fact that your clients have had samples of the lard in question in this case submitted to analysis and have found it to be adulterated with beef stearine? And I shall be obliged if you can favour me with your answer by Tuesday's post at the latest.—Yours faithfully,

Messrs. Boote & Edgar, Manchester.

RALPH SIMEY.

(Copy.)

18 & 20, Booth-street, Manchester.

November 6th, 1893.

LAIDLAW v. WILLSON.

Dear Sir,—Our Mr. Edgar, who attends solely to this matter, is away, and we cannot therefore give you an answer to yours of the 4th as requested.

We will place your letter before him on his return.—Yours truly,

BOOTE & EDGAR.

The Clerk to the County Council, Durham.

(Copy.)

Exchequer-buildings, Durham, November 7th, 1893.

LAIDLAW v. WILLSON.

Dear Sirs,—I am obliged by your letter of 6th instant, but as the question I ask is one of pure fact I cannot see why Mr. Edgar's absence prevents you from answering it. And I shall be obliged if you will telegraph me with an answer before 3 p.m. to-morrow, as the committee will meet at that hour to consider the matter.—Yours faithfully,

RALPH SIMEY.

Messrs. Boote and Edgar, Solicitors, Manchester.

(Copy.)

18 and 20, Booth-street, Manchester,

November 7th, 1893.

LAIDLAW v. WILLSON.

Dear Sir,—The writer regrets that he was unable to reply to your letter yesterday as desired by you.

Our clients have had a sample of the lard in question submitted to analysis with the result, that the Public Analyst to whom the same was submitted, in communicating the result of his analysis stated his opinion that the sample could not be one of our clients' lard. As we said in our previous letter no sample of our clients' lard could contain the percentage of beef stearine alleged. Your Public Analyst will have no difficulty in finding any quantity of our clients' lard in the county of Durham, and as our clients' warrant their lard they will take up the defence of any sample of their lard which the Analyst may procure.—Yours faithfully,

BOOTE AND EDGAR.

Ralph Simey, Esq.,

Clerk of the Durham County Council,

Exchequer-buildings, Durham.

(Copy.)

18 & 20 Booth street, Manchester, November, 8th 1893.

LAIDLAW v. WILLSON.

Dear Sir,—We are in receipt of yours of the 7th instant. You would have our letter this morning, therefore there is no need to wire you.

No one in the office knew anything about this matter except Mr. Edgar, and they were unable to reply to you either upon the question of fact or law in connection with it.—Yours truly, BOOTE & EDGAR.

R. Simey, Esq.,

Clerk to the Durham County Council, Durham.

(Copy.)

Exchequer-buildings, Durham, November 9th, 1893.

LAIDLAW v. WILLSON.

Dear Sirs,—I have laid your letter of 31st ult. before the committee of the County Council having charge of this matter.

The committee concludes from the terms of your letter of 7th instant, that the statement in mine of 4th instant is correct, namely, that your clients have had a sample of the lard submitted to analysis and have found it to be adulterated with beef stearine.

Seeing, therefore, that the sample in question was admittedly adulterated, and that the Queen's Bench Division has already decided that the contract-note and invoice amount to a warranty, the only question remaining is whether or not the sample was of your clients' manufacture, and it seems to the committee that that is a question of importance only to your clients and Mr. Willson, and that no public benefit will arise from the trial of it.

I am also to inform you that, as a general rule, the name of the manufacturer is not disclosed to the County Inspectors when the sample is taken, nor until the case is brought into Court, but that the usual course will be followed with respect to any samples of your lard which may hereafter be taken in the county and found to be adulterated.

And I have also to ask you to be good enough to send me a copy of the report of the Public Analyst to whom your clients submitted the sample in question.—Yours faithfully,

RALPH SIMEY.

Messrs. Boote and Edgar, Solicitors, Booth-street, Manchester.

(Copy.)

18 & 20, Booth-street, Manchester,

November 11th, 1893.

LAIDLAW v. WILLSON.

Dear Sir,—We are in receipt of yours of the 9th instant.

We think you will find that our clients' name will be disclosed whenever the County Inspector takes a sample, as our clients always guarantee their lard, but he is not likely to get a sample of their lard which will be found to be adulterated.

We have no copy of the report of the Public Analyst to whom the sample was sent. His report was made by telephone.—Yours truly,

BOOTE & EDGAR.

Ralph Simey, Esq.,

Clerk to the Durham County Council.

(Copy.)

Exchequer-buildings, Durham, November 18th 1893.

LAIDLAW v. WILLSON.

Dear Sirs,—Referring again to our correspondence about this case, I have to draw your attention to the report in *FOOD AND SANITATION* of 11th instant, of a case before the Mansfield Magistrates, in which it is stated that "Mr. N. Kilvert . . . admitted that for stiffening purposes his firm were in the habit of adding up to 3 per cent. of beef stearine to the lard," and to ask you to be good enough to inform me how your clients reconcile that with the statements in your letters to me as to the purity of their lard (31st October), that they warrant it (7th instant), and that we are not likely to get a sample of it which will be found adulterated (4th instant).

The favour of an early answer will oblige.—Yours faithfully,

RALPH SIMEY.

Messrs. Boote and Edgar, Solicitors, Booth-street, Manchester.

(Copy.)

18 & 20 Booth street, Manchester,
November 20th, 1893.

LAIDLAW V. WILLSON.

Dear Sir,—We are in receipt of yours of the 18th instant, and hardly see what the report in *FOOD AND SANITATION*, the accuracy of which is not only impeached by our clients, but by the Analyst witnesses, has to do with the present case. We confirm our letters, and still invite you to act upon the suggestion made by us. We shall then be quite prepared to prove the statements contained in our letters, or to take the consequences.—Yours truly,

BOOTE AND EDGAR.

Ralph Simey, Esq.,
Clerk to the Durham County Council,
Exchequer-buildings, Durham.

(Copy.)

Exchequer-buildings, Durham,
November 21st, 1893.

LAIDLAW V. WILLSON.

Dear Sirs,—Your letter of yesterday seems to leave me no alternative but to send a copy of my correspondence with you to the editor of *FOOD AND SANITATION*.—Yours faithfully,

Messrs. Boote and Edgar, Solicitors, Manchester.

(Copy.)

18 & 20, Booth-street, Manchester,
November 22nd, 1893.

LAIDLAW V. WILLSON.

Dear Sir,—We are in receipt of yours of this morning in which you intimate your intention of sending a copy of your correspondence with us to *FOOD AND SANITATION*, and that you prefer to follow this course rather than to accept the challenge which our clients have given to you. There are hundreds of retailers selling our clients' lard in the county of Durham, and we are prepared to give you a list of their names in order that you may procure our clients' lard, and take such steps as will test the accuracy of the statements contained in our letters.—Yours truly,

BOOTE & EDGAR.

Ralph Simey, Esq.,
Clerk to the Durham County Council,
Exchequer-buildings, Durham.

THE TRADE IN ROTTEN TINNED MEATS.

There exists in London a "gang" who make it their business to get hold of tinned meats that are unfit for food, and to dispose of the tins by various channels. We have before us the names of the members of the gang, of firms they have victimized—in one recent instance to the extent of £210—which amount was an advance secured on a consignment of tinned mutton. The advance was not repaid, and an attempt was made to sell the goods, which resulted in the discovery that the whole lot were rotten. The same gang endeavoured to secure from another source an advance upon a consignment of lobsters. A part of these lobsters was seized on November 21st by Mr. Strutt, Sanitary Inspector employed by the Strand Board of Works, who asked Mr. Vaughan at Bow-street, to make an order for the destruction of 1,680 tins of lobster. It appeared that the lobster in question was seized by sheriff's officers at Limehouse and sent to an auction room in Chancery-lane to be disposed of. Nearly 1,700 tins were purchased by a grocer at Tottenham, who, finding that the contents were putrid and utterly unfit for food, sent them back. Mr. Vaughan ordered the lobster to be destroyed. These tins were of the same brand as some recently condemned by Mr. Lushington, which were so bad as to make the medical officer who inspected them seriously unwell. We call public opinion to the existence of this gang, because their practices are not only gravely endangering the health of the community, but they do serious damage to the canners of first-class goods, and to retailers who, by cheapness or the arts of a shabby salesman, may purchase and sell such goods. The London Chamber of Commerce possesses a produce section. Those composing that section who happen to be engaged in the tinned meat trade should realise more than all others what a tinned meat scare would mean, and should take steps to extirpate practices indulged in hitherto by the gang we allude to with impunity. A little trouble and organisation would render it impossible for them to pursue a traffic that must have in many cases produced fatal results, and which, unless seriously grappled with, may cause poisonings that will do thousands of pounds of damage to a great and important industry.

THE EXCESS WATER IN BUTTER SWINDLE.

The dangerous character of the advice given to retailers by certain grocers' trade journals has been repeatedly commented upon in our columns. Such journals are written entirely in the interests of manufacturers, and devoted to the expression, solely and wholly, of the views of their advertisers: their aim being to shield them from the consequences of whatever fraud they may be practising. It is for this reason, doubtless, that two leading grocers' journals have recently been endeavouring to make retail grocers believe that it was their duty to support the movement now on foot to permit water to the extent of 20 or 24 per cent. in Irish butters. We are pleased to see that, hard as they have tried to induce the Manchester, Salford and District Grocers' Association to support this movement, and although they have alleged that that Association was acting in concert with the Manchester Produce Merchants' Association in the matter, their efforts have been frustrated, and the statements as to concerted action are absolutely untrue. All that the Manchester, Salford and District Grocers' Association have done has been to determine to defend one of their members who holds a warranty of purity from the wholesale dealer. It would have been suicidal and detrimental to the interests of retailers had the Manchester Association, or, in fact, any Association of retail grocers, adopted any other policy than that of strictly defending their members.

We have shown by irrefragable evidence—which the Irish butter merchants themselves know to be indisputable—that there is not an atom of warranty for the assertion that Irish butter cannot be made with a less percentage of water than 20 per cent. From thousands upon thousands of analyses our columns have again and again proved that well-made butter ought not to contain more than 12 per cent. of water, and that in butter containing more than this, the excess water is not only designedly left there for purposes of fraud, but is a swindle upon the retailer as well as the consumer. Few retailers realise the amount of money they lose by *unsuspected leakages*. In this instance of butter containing excess water, the retailer may lose as high as a halfpenny to three farthings per pound of butter, from water oozing out of the butter on to the slabs, and flooding his counters, the same water having been bought by him as butter from the wholesale merchant, and paid for at butter prices. It is not an uncommon occurrence for a retailer to find as much as 8 or 10 per cent. of *unsuspected leakage* of this character. What that means in loss of profit, or, to put it plainer, in, possibly, an absolute loss upon the sale of the butters, any retail grocer can calculate for himself in a moment. Those, therefore, who endeavour to persuade retailers that their interests lie in protecting and bolstering up a swindle of this nature are, we repeat, the very worst, because the most insidious, of the grocers' enemies. It is not the first time that we have had occasion to call attention to disgraceful attempts of this character upon the part of grocers' journals to deceive retailers in the interests of certain sections of their advertisers.

They are also the worst friends of the Irish butter trade who attempt to prove what is absolutely untrue, that Irish butters cannot be made without at least 20 per cent. of water. Thanks to our exertions, which led to the appointment of Inspectors under the Food and Drugs Acts in Ireland, prosecutions have been taking place for a few months past, and fines have been inflicted for percentages even as high as 18 per cent., thus convicting the Irish butter merchants out of their own mouths of deliberately misleading English buyers. We have striven, as all readers of our journal know, with might and main to give fair play to English, Irish, Scotch and Welsh industries, but we have no intention of lying in the interests of any. If Irish butter, or English butter, be not made as well, or be not as pure an article as Danish, Swedish, Italian, Brittany, or other butters now competing with it in our markets, it is the duty of those concerned with Irish and English industries to raise the quality and the methods of their manufacture to those of foreigners. It is the disgrace of our Government that our Board of Agriculture has done nothing whatever of a real nature to organise the production of Irish or English butter upon such a scale, and to secure such manipulations as would enable the largest butter buyers in England to handle English and Irish butters. Truth compels us to say that the only reason why the largest dealers in England are unable to purchase Irish or English butters to a greater extent, lies in the fact that they can neither rely upon quality nor quantity. It is absurd to suppose that dealers disposing of thousands of kegs of butter per week, could take the trouble to make purchases of lots of ten or twenty, or even less than this quantity, and to go through the onerous work of testing almost every keg offered to them. Life, as well as business, under such circumstances, would be unendurable. The moment that English and Irish butter makers are in a position to offer regular quantities and qualities in lots of from 100 to 1,000 or more kegs, of which, one keg will be an absolutely fair sample of the bulk, then the largest butter factors can deal with English and Irish butters.

POWNCBEY'S PURE WINES, OLD BRANDIES

And THOROUGHLY MATURED WHISKIES,

Are specially adapted for Medicinal and Family Purposes.
QUOTATIONS ON APPLICATION.

POWNCBEY & CO., 183, Oxford St., London, W.
Free Delivery. No Agents. Terms, Cash.

Those interested in agricultural development in England and Ireland would do much better to look the facts squarely in the face, and place themselves in a position to compete with foreigners, by establishing large creameries and securing unvarying quantity and qualities, than by attempting to swindle the public, and to hocus the retailers into believing that it is for the benefit of English and Irish industries that they should pay 1s. 2d., or more, per pound for an excess 8 or 10 per cent. of water, made to stand upright, and sold to them as butter. If England and Ireland had a Board of Agriculture worth its salt, and a Minister with a particle of intelligence, English and Irish dairy farming would not be in so lamentable a condition. There is food for reflection in the knowledge of the facts, that whilst we have the finest pasture land in the world in England and in Ireland, the finest breeds of cattle—which other countries have to buy from us—and that while we make machinery for the whole world, those countries having less favoured pastures, and whom we have to supply with cattle and machines, are the countries that are thrusting England's and Ireland's butters from our markets.

We repeat, it is not swindling that will benefit English or Irish butters, but honesty in manufacture and the development of the same business qualities that have raised the use of Danish butter in ten years from 30,000,000lbs. to 90,000,000lbs. An enlightened dairy policy on the part of our Board of Agriculture, the appointment of real scientists of the capacity of Professors Stein and Boggild, and the expenditure of some money to assist in the establishment of large creameries, would very quickly have its effect in materially reducing the consumption of Danish and other butters in England, and in a like measure benefitting English agriculture.

DEATH FROM EATING CORNED BEEF.

At the inquest on Nov. 21, at Maesbury, near Oswestry, concerning the death of Amy Mullard, aged 5 years and 8 months, daughter of Edward and Annie Mullard, of Gwernybrenin, who died on the 12th inst. from the effects of eating corned beef. It appeared that the deceased ate very heartily of the beef for supper the previous night. She afterwards had some violent attacks of vomiting, and also convulsions during the night. Other children had eaten the corned beef, and one of them became ill next morning, but recovered. The Coroner read a letter from Mr. T. P. Blunt, the County Analyst, stating that he could not find any poison either in the meat or in the child's stomach. The microscope revealed numerous organisms in the meat, and there was no doubt it had undergone some fermentative change, though the smell and taste were wholesome. Dr. George Leslie, Oswestry, who made the post-mortem examination of the body, considered that death resulted from the mechanical irritation caused by the fermentation of the beef. The jury returned a verdict accordingly.

VINEGAR PROSECUTIONS.

At South Shields Petty Sessions, on November 28th, Mr. Daniel Sharpe, Hebburn, was summoned for a contravention of the Food and Drugs Act. Mr. James Laidlaw, Inspector of the Food and Drugs, prosecuted, Mr. Neal (Birmingham) appeared for the defendant and the makers of the vinegar, Messrs. Hills and Underwood London. Mr. Laidlaw said on the 9th October he sent his assistant to the defendant's shop for a pint of malt vinegar. He followed him in, and they divided the vinegar into three parts, one of which he sent to the Public Analyst, one he left with the defendant, and the third he now produced in Court. He also produced the Analyst's certificate, which stated that the sample was not malt vinegar—but contained only 60 per cent. of malt vinegar. It was agreed to send the sample in the hands of the Magistrates to Somerset House for analysis, and to request the attendance of the County Analyst at the adjourned hearing of the case.—Henry Doncaster, of the Hebburn Colliery Co-operative Stores, was similarly charged, and after hearing formal evidence the Bench, on the application of Mr. Neal, granted an adjournment in this case also.

At the Keighley Police-court, on November 24th, a summons against James Groves, grocer and provision dealer, Low-street, Keighley, for selling adulterated vinegar, and another against Wilfred McDonnell, grocer, Upper Green, for selling adulterated butter, were adjourned until December 5th. Mr. Groves asked the Bench to officially submit the sample in the possession of the Inspector (Mr. Banderson) to the authorities at Somerset House. Samples had been sent to the makers of the vinegar and to the Public Analyst. The latter certified that the vinegar contained 50 per cent. of added acid, although the makers guaranteed that the article was absolutely pure. They had had several cases of this character brought against them, and only one conviction had been obtained. The Bench could not see their way to take the course desired until it was proved that the evidence of the Public Analyst was unsatisfactory.

NOTICE TO SUBSCRIBERS.

Index to Volumes I. and II. is now ready, price 1s. Volumes I. and II., bound in cloth, gold lettered, with index complete, 20s. each, carriage paid. Postal Orders to be made payable to the Publisher, FOOD AND SANITATION, 188, Strand.

THE CONDENSED SKIM MILK IMPOSTURE.

At the Bath Sanitary Committee's meeting, the Inspector stated that he had taken some samples of condensed milk owing to complaints which had been made. The first sample contained the following:—Water, 81.4; milk sugar, 8.8; fat, 3.5; cane sugar and leassin, 56.8 in a hundred parts. This condensed milk was from the degree of its condensation very poor in fat, and as it practically consisted of one-half sugar and nearly one-third water, its nourishing properties were very low. Another sample consisted practically of ordinary milk condensed to one-half its bulk and then mixed with its own weight of cane sugar. Some discussion ensued as to the poor quality of the articles, but the Clerk pointed out that the samples might none the less be called genuine samples of condensed milk. Mr. Farwell thought people should know that they were not buying milk. The Chairman remarked that it was represented as condensed milk, but it was not. Mr. Hunt: Condensed water. The Chairman: Sugar and water. Mr. Montagu was asked to take further samples, and Mr. Moger to report on the law of the subject. One of the milk samples was of the lowest possible quality, and it was decided to caution the vendor.

DURHAM AND ADULTERATION.

Mr. B. Scott-Elder, Chief Inspector Food and Drugs Acts, Durham County Council, reported to the Council on the 8th inst. as follows:—

In the last case which was referred to in my last report, in which the defendants relied upon a printed stamp on the bladder ("Warranted Pure Star Brand") as a written warranty, the Magistrates, after adjourning the case for a month, decided that the stamp in question was a written warranty within the meaning of the Act. After consulting with the Clerk of the Council, I applied to the Magistrates to state a case for the opinion of the Queen's Bench Division of the High Court of Justice, and they have done so, but the case has not yet been heard. With reference to the case referred to in my last report, proceedings were taken against the wholesale dealers (a Liverpool firm), and they were convicted and fined £5 and costs, while the local wholesale dealer and the retailer were not even put to the inconvenience of appearing in Court. This is the first case in the country in which a summons against the retailer has been allowed to lie in abeyance, and the intermediate wholesale dealer has been passed altogether, in order that the real offender may be reached and punished. During the quarter no less than three samples of lard have been submitted to the authorities at Somerset House, at the request of the retailers, or, more properly speaking, at the request of the wholesale firms who undertook their defence. These samples were certified by the County Analyst to contain 8, 7, and 5 per cent. of beef fat. In the first two cases his certificates were corroborated, and convictions resulted, but in the latter case the Somerset House authorities have certified that "the results of their analysis do not afford evidence of the presence of beef stearine or beef fat." The County Analyst is actually in possession of the beef fat he extracted from the sample, and is quite willing to produce it when required. The case at present stands adjourned.

Convictions have resulted in every one of the vinegar cases, but two cases call for special comment. At the hearing of one of them the following telegram from the London manufacturer was read:—"Monstrous that . . . should have been summoned. Sample 358 examined to-day is perfectly pure and excellent vinegar. No pyroligneous acid. Your Analyst is grossly mistaken in his judgment," and the Magistrates thereupon granted an adjournment on the retailer's application. At the adjourned hearing, however, the manufacturers refused to defend, simply sending a communication to the effect that they were advised they were not called upon to do so, as they were confident of the purity of their vinegar. The defendant was consequently convicted and fined 5s. and costs, whilst the action of the manufacturers was strongly commented upon by the Bench. In the other case an application for an adjournment was made by the same manufacturers, and some time afterwards they gave notice that they would not accept the certificate of the County Analyst, and required his attendance at the hearing, in accordance with Section 21 of the Act. But within twenty-four hours of the adjourned hearing information was received that they had discovered that the vinegar was not theirs, and, therefore, again refused to defend. At the hearing, the different parties concerned being all represented by solicitors, the intermediate wholesale dealers (a Newcastle firm) called a large number of witnesses to prove that they had in no way tampered with the vinegar, and that they sold it to the defendant exactly as they received it. The manufacturers, however, again asserted that the vinegar was not theirs. The Magistrates considered the case proved, and fined the defendant, a trader in the Lanchester district, 40s. and costs.

From these prosecutions (particularly those for lard and vinegar) it appears that manufacturers are being brought in this county within the operation of the Act to a much greater extent than has hitherto been the case.

THE resources of the land of wooden nutmegs are not yet exhausted. The recent World's Fishery Congress at Chicago, at which Mr. J. J. Armistead, of the Solway Fishery, gave an address by deputy, concluded with a fish banquet, which was given in the New York State Building. The tables were set for a hundred guests, President Palmer in the chair. The fare was sumptuous, as the Americans well know how to make it, and consisted very largely of fish, but not by any means entirely. Some amusement was caused by the discovery that the sardines in the boxes taken from the Exhibition, although tempting to the eye, were made of some metal, and refused to come out when wanted.

THE INFLUENCE OF FOOD ADULTERATION UPON HEALTH.

By Dr. Alfred Hill, Medical Officer of Health and Public Analyst, Birmingham.

Continued from page 859.

The Edinburgh case was dismissed by the Sheriff on the ground that the medical opinions were so diverse, and that it had not been proved that the peas had been rendered injurious to health.

One of the two Liverpool cases was dismissed because the magistrate was of opinion that the Act did not prohibit the use of such a substance to preserve the natural colour of a food, provided that it did not render food harmful to the consumer. He came to the conclusion that in the present case the use of the copper was not injurious to the consumer. He did not wish to be understood to be laying down a principle applicable to cases which might subsequently arise. Both the sheriff and the magistrate, apparently, require that the injury shall be sufficient to be actually proved by the production of distinct symptoms of poisoning.

If after the labours of the day a stimulant or "night cap" is indulged in, the favourite modern variety of it—whisky—is not to be implicitly relied on, for several cases heard recently show that this spirit is subject to adulteration of more than one kind, and of a very dangerous character. It has been for some time permitted by the Excise to use alcohol in the arts and manufactures free of duty, provided it was first mixed with one-tenth its volume of methyl alcohol or wood spirit, so as to render it unfit for use as a beverage. It was found, however, that in spite of this nauseous addition, the methylated spirit after certain treatment, and especially after flavouring with oil of peppermint, was much used as a beverage; so in order to effectually stop the fraud on the revenue it was resolved to add also petroleum to the spirit, which, besides rendering it nauseous, caused it to become turbid on mixing it with water. The resources of science, however, which seem to be as much pressed into the service of the disingenuous as the "ingenuous arts" have been employed to purify this mixture and render it potable, and it was for selling this purified petrolised spirit that the prosecutions I have referred to were instituted. Convictions were obtained and fines imposed in each case. The effects on the system of such spirit must from its nature be extremely injurious.

Foods and drinks by which the body is sustained in health as well as in sickness are not, however, the only subjects of adulteration, the immoral and cruel practice extends also to the drugs upon which we rely for relief from illness, whether induced by adulterated food and drink or any other cause. Surely it is the refinement of atrocity to tamper with the drugs which are relied upon both by the patient and the physician for relief from bodily ills, yet even these agents are not exempt from the curse of human greed, the *auri sacra fames*. Time forbids me to enlarge upon this portion of my subject, so I will content myself with mentioning some instances of falsified drugs, nearly all of which I have personally analysed: Milk of sulphur containing as much as 67 per cent. of sulphate of lime; seidlitz powders deficient in weight and particularly in Rochelle salt, in one instance none was present; citrate of magnesia containing neither citric acid nor magnesia; opbebs adulterated with starch, with stalks, and with "piper crassipes"; saffron, consisting principally of *Calendula florets*, dyed with aniline dye, and weighted with mineral matter (it is worthy of remark that saffron is worth several pounds per ounce); castor oil consisting of some common oil mixed with croton oil; essential oil of lemons containing one-third to one-half its weight of oil of turpentine; soda-water containing no soda; compound spirit of ammonia made of too low a strength (only 37 per cent.); spirit of nitrous ether containing little or no ethyl nitrite, or adulterated with water; borax adulterated largely with carbonate of soda (20 per cent.); tincture of iodine deficient either in iodine or iodide of potassium or spirit; tincture of rhubarb without saffron; tincture of benzoic of less than half its proper medicinal strength; tinctures deficient in spirit, or containing none at all (testotal tinctures); tincture of opium containing too little opium; ammoniated tincture of opium destitute of benzoic acid; paregoric containing no opium at all and no oil of aniseed; scammony adulterated with chalk and starch. It is said that *assafoetida* containing only 5 per cent. of the genuine drug has been sold; and cream of tartar, mixed with sulphate of lime and alum; while quinine has been known to be adulterated with salicin, &c.

These examples suffice to show the serious nature and alarming extent of the adulteration of drugs.

Of the samples of drugs I examined last year, 127 in number, 27 per cent. were adulterated.

Now after this partial review of the subject of adulteration, illustrating the addition of foreign substances in some instances, and the abstraction of natural ingredients in others, I can only come to the conclusion in which I think you will agree, that such interference with the natural characters of food are not made in the pecuniary interest of the consumer. It is true that the adulterators plausibly argue that it is for the benefit of the poorer classes, who, they say, could not afford to buy the genuine article, and if they could not purchase these inferior goods they would be deprived altogether of the benefit of them. But what is the actual fact? Watered milk is sold at the same price as the genuine, butter mixed with margarine at the full price of butter, and even margarine itself at the price of butter, or double its own proper retail value; coffee is mixed with chicory and sold at a price far above the average price of the mix-

ture, not, therefore, to the benefit of the purchaser, but, as in all such cases, to the advantage of the vendor. In a recent vinegar case in which I was engaged, it came out that genuine malt vinegar is sold at one shilling a gallon; but the spurious vinegar in question, consisting of coloured dilute pyroligneous acid, and manufactured at a cost for material of about 2½d. or 3d. a gallon, was sold retail at the rate of 1s. 4d. a gallon, or 4d. more than the price of the genuine, and in every way superior article, superior in flavour, in odour, in dietetic value, and, therefore, in its influence on health.

The commercial aspect of the question, important as it is, however, sinks into insignificance compared with the physiological or sanitary aspect of it.

Supposing that the dose of alum in bread, potash in cocoa or wine, copper in vegetables, boric acid and borax, salicylic acid, sulphurous acid, and many other strange chemical compounds in almost every kind of food and drink are not directly and palpably poisonous in their effects, still it cannot be imagined that their repeated and more or less constant ingestion is without danger and injury. I cannot believe that we are benefited at breakfast by having added to our bread a dose of alum, however small, or by borax in our butter and milk, and chicory in our coffee, starch in cocoa, and glucose in honey.

Nor can I be convinced of the advantage of meat preserved by sulphurous acid, peas and pickles greened with copper for dinner, with potash salt and salicylic or benzoic acid in the wine, in addition to the sophistications already mentioned of the bread, butter, and other articles of food.

Supper does not to my mind derive any advantage from a repetition of these sophistications, nor do I appreciate the addition to my grog of methylated spirit or petroleum.

The habitual administration of these drugs to persons unaware of their presence, not in need of medication, and if in need preferring to know when they are the subjects of it, and to undergo it at least at the hands of a properly qualified man, is a great evil and no small danger. It is probably the cause of many of the obscure ailments which are a great trouble to the victim, and an inscrutable mystery to the physician, but as long as scientific men of eminence can be found to support with their sworn evidence such malpractices there is little hope of improvement. At the same time there is the greater necessity for Medical Officers of Health using their influence to neutralise such action by every legitimate means, and I should be very much pleased if my opinion on the subject were to be endorsed by them, and followed up by some action, which, while it aims at the protection of the public health, will at the same time enhance the value of their services and reflect credit upon themselves.

DISCUSSION.

The Chairman said there would be no discussion on the address given at the annual meeting. It was his pleasing duty to move a resolution which, he was sure, if it were duly seconded would be carried by acclamation. Before doing so he was pleased to testify to the great admiration which, personally, he felt for the address which had just been read to them. He was sure the effect produced on himself would be the same as that produced upon all of those present—that of admiration for the very lucid, clear explanation which Dr. Hill had given. The very graphic way in which he described the adulteration which he had known by personal experience, brought before his (the Chairman's) mind the at one time well-known work which had such a sale, and which, in its way, did an amount of good, but which was now known to very few people—he meant that work entitled, "Death in the Cup." Dr. Hill's paper should be published, and he hoped the newspapers would publish it freely. He did not know that he ever heard a more fitly summing-up of the state of knowledge at the present time with regard to adulterations. One point occurred to him which some of them might know and some of them might not know—there was an exceedingly valuable analytical periodical which had been on sale for some months. It was entitled, "FOOD AND SANITATION." That paper was drawing up a very great deal of information with regard to adulterations, of which Dr. Hill's paper was a summary. Only one subject Dr. Hill did not touch upon, the adulteration of meat extracts. "FOOD AND SANITATION" devoted a few months ago several chapters to what were termed "Meat Extract Revelations." He (the Chairman) would not mention the names of the meat extracts, but several of the meat extracts which they were in the habit of giving to patients in hospitals, &c., instead of being the essence of meat, which they professed to be, contained no meat or very little meat in them; so that instead of feeding their patients with beef tea they were starving them. The meat extract revelations were as startling almost as Dr. Hill's paper. He was sure they would all share the admiration which he (the Chairman) personally felt for the paper read by Dr. Hill, and he would move a vote of thanks to Dr. Hill for the excellent paper he had given.

Sir Charles Cameron seconded the motion. He said the paper they had heard was a most admirable one, and with the Chairman he thought it summarised their present knowledge of the various forms of adulteration. The paper altogether was of a most suggestive character, and as no discussion was to be permitted upon it, and their time was valuable, he would second the motion, at the same time expressing the opinion that the paper was what a paper of that kind should be.

The motion having been carried with acclamation, Dr. Hill returned thanks, stating that he was pleased to know that the paper had proved in any way acceptable to the meeting.

Dr. J. S. Cameron said that as the Chairman had ruled that there should be no discussion on Dr. Hill's paper, he would, with the Chairman's permission, move a resolution which was suggested by something which occurred in the paper. Dr. Hill spoke, and he (the speaker) thought they all agreed with him, on the great importance

of not allowing the adulteration of milk. They were continually face to face with the difficulty that milk, though it was declared unadulterated because it reached a certain standard, was adulterated. If milk came up to the very low standard fixed it was certified as being pure milk, and they could not interfere at all. He therefore moved; "That in the opinion of this provincial meeting of the Society of Medical Officers of Health no milk shall be allowed to be sold as new milk which contains less than twelve parts per hundred of solids, of which twelve parts not less than three and a half shall be butter fat."

Dr. Mason seconded.

Dr. Thresh, as a medical officer who had to examine a large amount of samples which did not come up to that standard, said he should certainly object to the resolution.

Sir Charles Cameron said that this was a subject in which he had taken a great interest. No one, perhaps, in Ireland had made a greater number of analyses of milk than he had. He had had the advantage of being able, as one of the lecturers in the Agricultural Institution in Dublin, to examine constantly the milk of individual cows and mixed milk from large numbers—20, 30, and 40—of cows. He was afraid the standard $3\frac{1}{2}$ per cent. of fat would be too much. It had often occurred to him that they ought to have two standards. They ought, at any rate, to have a standard which would not admit of argument over it at all, except as to the correctness of the analysis. Of course, if the figures of the analysis were disputed, it would be a different matter; but if it were allowed on both sides that milk did not contain a certain quantity of solid matter, there should be a conviction necessary to follow. But there might be milk which was not quite so poor, but still with regard to which they might not be able to come to the conclusion that it was adulterated, from the circumstance that it was the mixed milk of a number of cows, such as that served to workhouses or hospitals, and where some of the cows would give a very rich milk and others a poor milk—where, perhaps, the number of cows would be 20 or 30—where the average should certainly be such as they knew to be the average quality of milk, at least 12 to $12\frac{1}{2}$ per cent. of solids and 8.5 per cent. of fat. That might be admissible, but there should be a standard about which there could be no dispute whatever. He was afraid, however, that in the matter they were dealing with 3.5 per cent. would be too much.

The Chairman: Except for mixed milks?

Sir Charles Cameron: It would be a difficult question to say how many cows contributed. Many of the small dairy proprietors in Ireland have only three or four or five cows. I think that if the standard of 12 per cent. were reduced to 11.5 per cent., perhaps that would meet the question.

Dr. J. S. Cameron: That is very nearly where we are.

Sir Charles Cameron: It is not. I very often find milk giving only 10.7 and 10.8, yet I would be afraid to give a certificate because the case might go to Somerset House. I often get milk containing 10.5 per cent. of solids. There may be 2.8 per cent. of fats. That would bring it up to the standard of Somerset House. We will say 8.5 and $2\frac{1}{2}$ per cent. I am perfectly sure that with regard to milk with 8.5 of solids minus fats and $2\frac{1}{2}$ per cent. of fats, making a total of 11, in 19 out of 20 cases in Ireland that would be adulterated milk, and might contain 10 to 12 per cent. of water added. I am afraid $3\frac{1}{2}$ per cent. of fats would be too much. Say 12 per cent. solids without the fats, or 9 and 3.

Dr. J. S. Cameron expressed his willingness to amend his resolution, making the percentage of fats 3 instead of $3\frac{1}{2}$.

Sir Charles Cameron: I will second that.

The motion was then carried.

THE LOCAL GOVERNMENT BOARD'S TWENTY-SECOND ANNUAL REPORT AND THE FOOD AND DRUGS ACT.

(Continued from page 363.)

all genuine butter contains water, in amounts varying according to the completeness with which the buttermilk has been pressed out, and the fact that the proportion found in butter of high quality is often considerable, has led to the introduction of water into the butter after the churning has been completed. On this subject Mr. Allen, Public Analyst for the West Riding of Yorkshire, makes the following observations:

"There is at present a systematic attempt to place on the English market imported butter containing an *excess* of water, and, in some instances, sophisticated with a small proportion of margarine difficult to detect, and liable to escape recognition unless the butter be subjected to a very special examination. Three samples have been recently received which contained water to the extent of 20 per cent. or upwards, in one instance, the proportion being as high as 29 per cent. It has been pretended that the amount of water in butter was affected by the weather, that is to say, that the dew on the grass eaten by the cows passed into butter! This preposterous statement was recently made in evidence."

Mr. Bell, Public Analyst for Cheshire, gives the following instance of the same kind of adulteration:

"The butters were adulterated with water, containing in one case as much as 88 per cent. This is a greater amount than I have ever met with before. In this case the butter broke up like a piece of crumbly Cheshire cheese, and the chief use of the butter fat was to hold the water and salt together, for the water and salt constituted 50 per cent. of this mixture; but what was still more surprising to me was, that after I had kept the butter for about two weeks, the water and salt were reduced to 33 per cent., the water having literally run out of the butter, carrying the salt with it. This adulteration

must be a serious loss to grocers buying such butter, for not only are they liable to heavy fines under the Adulteration Act, but they are also considerable losers by the loss of their profits, for in a case like the above they would lose more than 20 per cent. of the weight before the butter was all sold."

Of the 4,743 samples of butter analysed, 725 were reported against, and in respect of 538 of these samples, legal proceedings were taken. Forty-one cases were dismissed; in 22, the vendors were merely required to pay costs; two were pending at the date of the returns; and in 478 cases penalties were imposed, amounting in the aggregate to £967 18s. 6d. There were 46 fines of £5; two between £5 and £10; six of £10; four between £10 and £20; five of £20; and one of £30.

The practice of selling mixtures of chicory and coffee as coffee has become too deeply rooted for eradication, but the returns for 1892 show some improvement in this particular as compared with those for 1891. Of 1,711 samples submitted to Public Analysts, 258 or 15.1 per cent. were reported against, the per-centage having been 18.6 in 1877-81, 17.8 in 1882-86, and 14.9 in 1887-91. In 1891 it was 17.0. The proportion of chicory was in many cases enormous, and there were instances in which only three, five, six, or seven per cent. of the mixture was coffee. In commenting on a case in which a penalty of 25s. was inflicted, in respect of a sample containing 90 per cent. of chicory, the Analyst for Paddington observes as follows:—

"The sale of coffee is in a very anomalous state. You are invited to 'Try our "celebrated" one shilling coffee.' If you do so, you probably find, on reading through the printing on the package, that it is described as a 'mixture of chicory and coffee.' Analysis shows the chicory to form usually from 50 to 90 per cent. of the weight. Should you prosecute the vendor, you will find that half the Magistrates on the Bench hold that you, having asked for 'coffee,' have a right to have that and nothing else. The other half hold that you may be served with anything containing some coffee, if only it is labelled 'A mixture,' whatever you might have asked for or the vendor have advertised to sell."

Of 258 samples of coffee reported against, 161 were the subject of legal proceedings; 38 cases were dismissed; in 12 the defendants were discharged on payment of costs, and 111 penalties were imposed, amounting in the aggregate to £124 0s. 6d. There were five fines of £5 each; but the others averaged rather less than £1 apiece; and it is evident that the profit of selling chicory, worth 2d. or 3d. a pound, at the price of coffee, can easily bear an occasional deduction in the form of a penalty of this amount.

The cheapness of sugar seems to make it no longer worth adulterating. Of 267 samples examined, 11 were reported against, for the most part on account of the addition of a minute quantity of dye, in order to make beet sugar pass as "Demerara." The Analyst for Cheshire refers to a case of this kind in the following terms:—

"A sample of white sugar was brought to me, which appeared to have an uncommonly blue shade. The person who bought the sugar was surprised to find that on using it for the purpose of sweetening oranges a bright blue colour was developed. This sugar was found to be dyed with what is called Nicholson's Blue, which is triphenyl rosaniline sulphonic acid. This colouring matter produces a weak blue shade in the presence of alkaline substances, but on the addition of an acid its rich blue tone is fully developed. Thus, in the above case, the sugar assumed a strong sapphire blue colour under the influence of the acid juice of the orange. There is nothing in this blueness to cause alarm, for it has long been the custom, in order to correct the yellowish tinge of the sugar, to use ultramarine; and the quantity required for this purpose is so infinitesimal, about one part to 180,000 of sugar, or four ounces to 20 tons, that it may be looked upon as a most innocent colouring substance; but my opinion is, that in the above case the sugar was so badly refined that, in order to make it marketable as high-class white sugar, an exorbitant amount of ultramarine would have been required, and, in order to avoid this, Nicholson's Blue was resorted to as possessing greater tinctorial power."

There was only one prosecution with respect to sugar; a fine of £2 was inflicted.

Proceedings were taken in 27 instances in respect of samples of mustard condemned by Public Analysts. In seven of these cases were dismissed, in four the vendors were let off on payment of the costs, and in 16, penalties were inflicted, amounting in all to £8 2s.

Only two samples of confectionery or jam were reported against, and neither was the subject of proceedings.

Twenty-seven samples of pepper have been reported against; there were seven prosecutions, of which five resulted in the imposition of penalties, amounting to £4 2s. 6d. The Public Analyst for Lancashire states that—

"The widespread adulteration in pepper prevalent some years ago has dwindled, under the combined influence of a firm administration of the law and a great depression in prices of peppercorns, to adulteration with bleached pepper husks, a sort of waste material from the manufacture of white pepper, with very small proportions of spent ginger, and a few other trifling materials and colouring matter."

Of the 1,145 samples of lard analysed, 17 were reported against. The prosecutions were 11 in number, and in nine cases fines were imposed, amounting together to £27 10s. One penalty was of £10 and two of £5 each. As to an imitation which has been recently placed on the market under the name of "lardine," the Public Analyst for Lancashire reports:—

"When imported, the buckets containing it bear the label *Lardine*, and it is sold as such to the retailer, but too frequently when it is placed before the public, either the letters "ine" are obliterated, or

the article is turned out of its package on to the counter without label, and sold without comment to the customer, who thinks he is purchasing lard. The article is made up either of beef fat or of the hard fat which remains when oleomargarine is pressed out of beef fat. It is softened down by the addition of cotton seed or other cheap oil, mixed with some proportion of hog fat, and prepared for market. When quite fresh it passes for lard with a not very critical customer, but some cotton seed oil has the character more or less of a drying oil. The mixture does not keep for one-twentieth of the time that real lard will keep good, and in a few months becomes quite abominable."

Very few samples of wine were examined, and two only were reported against. One of these was a claret in which, probably by accident, there was a considerable amount of salt; the other was so-called "British raspberry wine," in which the presence of salicylic acid and logwood was detected. There was no penalties.

Of the 477 samples of beer analysed, 80, or about one-sixth, were reported against for excess of salt. It is noticeable, however, that no less than 70 of these were in the district of a single Public Analyst, who adopted the high standard of 50 grains of salt per gallon as the permissible maximum. On this point the observations in our twentieth annual report may be referred to. The difficulties of dealing under the sale of the Food and Drugs Act, with the adulteration of beer, are thus described by the Analyst for the Isle of Wight:—

"There is no legal definition of beer, and this article may be made of almost any material the manufacturer may deem fit. The Inland Revenue allows beer to be brewed without malt or without hops, and even the slight restriction which was formerly placed upon the use of salt in brewing is now done away with, so that the brewer is absolutely at liberty to brew beer in any way he may please and of any strength. The Public Analyst is at present absolutely powerless to deal with beer, and it is a waste of energy and money to analyse beer under the Food Acts."

Proceedings were taken in 70 cases, all in the county of Glamorgan; in 31 of these penalties of 5s. each were inflicted, five were dismissed and 84 were pending at the date of the returns.

Nearly one-fifth of the samples of spirits examined were reported as having been diluted so as to bring their strength below that prescribed by the Act of 1879; and it is instructive to observe, year after year, that the proportion condemned is higher than that of nearly every other article. In this instance, therefore, the establishment of a statutory standard, though it was necessarily a very low one, has not had the effect of preventing dilution, which is often very considerable. On this subject the Public Analyst for the county of Durham writes as follows:—

"It would appear, on the face of it, that the mixing of a known quantity of water with a known quantity of a strong spirit was one of the easiest operations under the sun, and yet to listen to police court evidence, it appears to be fraught with difficulty and teeming with accident; the most singular part of the matter being, perhaps, that the accidents always tend in the direction of an excess of water, not of spirit. In one instance this quarter, one of the 'accidents' led to the presence of over 81 per cent. too much water in a sample of whisky. I have said before, and I can only repeat, that it is perfectly clear this thing will continue so long as magistrates regard the offence as one to be met in most cases with a light penalty."

Proceedings were taken in respect of 496 of the 708 samples reported against; 48 cases were dismissed; 17 vendors were let off on payment of costs; one case was pending at the date of the return; and in 430 instances fines were imposed amounting in all to £568 11s. 2d. There were 26 penalties of 25s. each, three between 25s. and £10, two of £10, and one of £15.

The extent of the disproportion between the number of samples of drugs reported against, and those in respect of which proceedings were successfully taken, suggests that the substantial adulteration of drugs may possibly be more rare than the percentage in the table would seem to indicate. Of the 141 samples condemned only 44 were the subject of prosecutions, and in just half of these cases fines were imposed, amounting in the aggregate to £26 0s. 6d. Only one fine was as high as 25s.

Among the articles not specially enumerated in the table, 233 were of arrowroot, of which all but one were genuine. As to vinegar, of which 14 samples out of 186 were condemned, there seems to be some uncertainty whether it ought to be regarded as spurious if not made from malt; whether, in fact, methods in vogue from time immemorial in various parts of the country for making it from apple juice, from sugar and water, from the "vinegar plant," and so on, must be regarded as illegitimate, although they have unquestionably produced an article known under the name of vinegar, albeit, possibly, of inferior quality to that derived from malt. Scarcely any cases of adulteration were reported among 172 samples of oatmeal, 110 of ginger, 99 of tapioca, 80 of rice, 40 of cornflower, and 28 of pickles. As usual, however, about a third of the samples of cocoa and chocolate were condemned, generally on account of considerable additions of sugar and starch. Tinned peas were found to be coloured with copper, and other tinned goods of various kinds contained traces of lead or of solder. Some aerated waters, too, had in them small amounts of lead, doubtless introduced in faulty methods of manufacture, and in one instance some soda water was found to bear evidence of sewage contamination. It seems very desirable, therefore, that the public should concern themselves rather more than they have hitherto done as to the quality of the aerated drinks which they consume in increasing quantity. Olive oil was largely mixed with cotton-seed oil, and wax contained paraffin. Cheese was in some instances largely adulterated with margarine, as in the following case described by the Public Analyst for Cheshire:—

"This cheese at first sight was fair to look at, and might have been taken for an ordinary Cheshire cheese, because it had a rich fatty appearance, but on analysis it was soon found that this unctuous look was due to water in excessive amount. The ordinary cheese has the following average composition: Water, 86.24; caseine, 31.21; fat, 27.42; ash, 4.21. But this adulterated sample was composed of: Water, 49.84; caseine, 32.12; fat, 13.21; ash, 4.81. On comparing the two, it will be seen that the difference is very great, and becomes greater still through the fact found by analysis that the fat in the adulterated sample is nearly all foreign fat, that is to say, the sample is what is called a skim milk cheese to which, in the process of manufacture, some animal fat other than butter fat has been added. Without any exaggeration, I can safely say that after the cheese had been standing in a moderately warm place, such as an ordinary room, for a few days, decomposition rapidly set in, the sample becoming so offensive that I would not give it to the beggar at my gates. This quick decay is no doubt due to the excessive amounts of water and curd, whereas in ordinary pure dry cheese, fat and curd are about in equal percentages; but in this adulterated sample the curd is 64 to 26 of the fat, and the result is that, instead of a slow ripening, we have a rapid rotting."

As to baking powder, of which a few samples have been analysed, the Public Analyst for the Isle of Wight refers to the difficulty created by the fact that this article has been regarded by some magistrates as not food, but merely a substance used in the preparation of food, and, therefore, as outside the Acts. According to this view, if alum is present in the baking powder, proceedings cannot be successfully taken against the vendor, although if that substance be detected in the bread made with it, the baker may be fined. As to some samples of the cheapest kinds of ices which are for the most part hawked about by itinerant Italians, the Public Analyst for St. Luke's reports the following results of some analyses:—

"The samples were procured in the hot weather, at a time when an outbreak of fever in a neighbouring parish had been ascribed to the impure materials used in making the ices. Some of these samples were obtained from street barrows and some from Italian ice shops. On analysis I found seven of them to consist of frozen water, sugar, and starch; four contained milk, sugar, and water; and one consisted of water, sugar, and lemon juice. None contained any cream, such as their name 'cream ices' might suggest. All of them were in a sound and healthy condition, no lead or other metal which might have been derived from the pewter freezing pot was present. I am of opinion that the occasional illness, and sometimes death, which follows after children have eaten ices is more usually due to the sudden check given to the digestive functions by the cold material, rather than to any poisonous or infective action. If the ices were made, as these were, from ingredients originally pure and undecomposed, they would keep free from putrefaction an indefinite time so long as they were in a frozen state. Most of the above samples were, for practical purposes, merely frozen paste or gruel, and were quite unfit for little children of weak digestive powers."

Of the 157 samples of miscellaneous articles above referred to which were reported as adulterated, 64 (including 29 of cocoa and 16 of olive oil) were the subject of legal proceedings; 10 cases were dismissed; in eight others the vendors had to pay the costs; three were pending when the returns were made; and 43 fines were inflicted, amounting in all to £48 19s. There was only one penalty as high as 25s.

Of the 32,447 samples analysed during the year, all but 215 were obtained by officers of local authorities. As is habitually the case, a much larger proportion (88 per cent.) of the private than of the official samples was found to be adulterated, since (apart from the fact that inspectors, unless they take especial pains to conceal the object of their purchase, often have superior articles supplied to them), a private individual is unlikely to take the trouble of procuring an analysis unless he is pretty certain that he is being cheated.

We have received from the Commissioners of Customs the report (Appendix, p. 461) on the examination, made by their Analyst under the 30th section of the Sale of Food and Drugs Act, 1875, of imported teas before they are taken out of bond. That the system continues to work satisfactorily may be inferred from the fact that of the 438 samples of tea procured by the officers of Local Authorities from retailers during the year, not one was found to be adulterated.

In pursuance of an Order of the House of Commons in June, 1892, we obtained a return of the names and postal addresses of the manufactories of margarine in England and Wales registered under the Margarine Act, 1887. We found that there were only eleven such manufactories, and that the Local Authorities within whose districts they were situate were the County Councils of Cheshire, Cumberland, and Staffordshire; the Town Councils of Birkenhead and Southampton, the Vestries of Bermondsey and Lambeth, the Greenwich District Board of Works, and the Commissioners of Sewers of the City of London.

"FOOD & SANITATION" has over 50,000 Readers: Medical Practitioners, Sanitary Inspectors, Food and Drugs Acts Inspectors, Wholesale and Retail Grocers, Weights and Measures Inspectors, Town Clerks, Solicitors concerned with the Food and Drugs and Public Health Acts, Surveyors, Medical Officers of Health, and the General Public.

ANALYSTS' REPORTS.

NORTH RIDING OF YORKSHIRE.

The report of Mr. T. Fairley, Public Analyst, to the Chairman and Members of the North Riding County Council, says that during the quarter ending September 30th, 1898, the samples received have been: Milk, 6; butter, 1; cheese, 3; lard, 2; pepper, 3; vinegar, 3; flour, 1; oatmeal, 1; whiaky, 7; gin, 1; brandy, 1—total, 29. Two of the samples of milk were adulterated, one from South Bank containing 53 per cent. and one from Saltburn containing 10 per cent. of added water as compared with the lowest quality of genuine milk. Four of the samples of whiaky were adulterated, one from Swainby with 36 per cent., one from Thornaby with 26 per cent., one from Eton with 10 per cent., and one from Guisborough with 6 per cent. of added water beyond the limits allowed by the Act. The other samples were reported free from adulteration.

REPORT OF MR. J. CARTER BELL, A.R.S., M.D., THE PUBLIC ANALYST FOR THE COUNTY OF CHESTER

upon the Articles Analysed by him under the above Act, during the Quarter ending 30th September, 1898.

During the quarter ending the 30th September, 1898, I have analysed 206 Samples, consisting of 50 Milks; 27 Butters, 14 Cheese, 14 Vinegars, 12 Lards, 5 Coffees, 8 Peppers, 1 Tea, 14 Spirits, and 66 Waters. 88 Samples were from the Nantwich Division, 36 Hyde 34 Wirral, 32 Altrineham.

Eight Samples were adulterated, namely, 8 Butters, 2 Milks, 2 Whiskies, and 1 Malt Vinegar. The Butters were adulterated with 85 per cent. of foreign fat, and the Vinegar was not malt vinegar but weak acetic acid coloured with caramel. The milks have been exceedingly good this quarter, and out of 50 Samples there were only two which I could call adulterated.

I see in to-day's paper that some of the farmers of Cheshire have had a meeting to complain about the analyses and Standards of Milk, and to memorialise the authorities of Somerset House to lower the Standard of Milk. In the first place, those gentlemen have no power to fix a Standard, and in the second, the Standard generally adopted by the Society of Public Analysts is so low, that no dairy of well fed cows could yield a milk of so poor a quality. I have visited many farms in Cheshire and Lancashire, and have had hundreds of cows milked in my presence, and have rarely found an abnormal Sample of Milk. The farmers of Cheshire may feel perfectly safe that no prosecution could ever take place in the County for naturally poor milk, as it has been my custom for nearly twenty years to follow up poor cases of Milk to their source, and only in one instance do I remember of a case which did not come up to a very low standard. In this particular instance, when I found that the milk was so poor, I asked the Inspector to obtain a Sample direct from the cows which corresponded with number one. I then visited the farm myself, and found five half starved cows, which were nothing more than animated bundles of bones. The cows were milked in my presence, and the analysis of the Milk again corresponded with number one. It must be perfectly patent to all, that the Milk supply of the United Kingdom is not to be brought down to correspond with such Samples as I have named. From the hundreds of Samples I have seen taken from the cows myself, and which I have analysed, I find the average composition of the Cheshire Milk to be:—Total solids, 18.32; solids not fat, 9.81; fat, 4.01. It will be interesting to compare this with a report made by a chemist to one of the large London dairies upon the Milk supplied during the last twelve years, which represents over 120,000 Samples. The average composition of this large number of Milks is:—Total solids, 12.9; solids not fat, 8.8; fat, 4.1. These figures plainly prove that the Standard is too low instead of being too high.

Total Number of Samples analysed during the quarter, 206. September, 30th, 1898.

MR. BIRON'S RIDICULOUS FINES AGAIN.

At Lambeth Police Court, last week, C. Savage, of Kennington Park-road, was summoned by Mr. H. Treherne Wiggs, on behalf of the Lambeth Vestry, for selling butter not of the nature, substance and quality of the article demanded by the purchaser.—The evidence showed that a sample of butter bought at the defendant's shop at the rate of one shilling per pound was found, upon analysis, to contain 64 per cent. of added margarine.—Mr. Biron fined the defendant 23 and 12s. 6d. costs.—J. Cox, of Clapham-road, was summoned for selling butter containing added margarine to the extent of 42 per cent., and was fined 10s. and 12s. 6d. costs.—J. Parageter, of Clap-

ham-road, was summoned for a similar offence. In this case the analysis showed the butter to contain 88 per cent. of added margarine. Mr. Biron fined the defendant 25 and 12s. 6d. costs.—H. Berry, of Clapham-road, was fined 25 and 12s. 6d. costs for selling butter containing added margarine to the extent of 80 per cent., and A. J. Brooke, of Bailton-road, was fined 25 and 12s. 6d. costs for selling butter containing added margarine to the extent of 84 per cent.—In the case of three other summonses, Mr. Kent, solicitor, took the objection that they had not been served as prescribed by the Act, which required that the summons should not be returnable within a less time than seven days from the date of service. In all three cases the summonses were served on the 10th, which did not allow seven clear days. Mr. Ricketts, who appeared for the defendant in another case, took a similar objection. Mr. Biron dismissed the summons on the technical point, but said there was no reason why the Vestry should not take out fresh ones.

HAS W. T. STEAD A FINGER IN THIS PIE?

A NEW DRUNK CURE COMPANY: CAPITAL £100,000.

L. B. TYSON AND CO., LIMITED.

Registered by C. W. Saffell, 55, Lincoln's-inn-fields, W.C., with a capital of £100,000 in £10 shares. Object, to acquire, by purchase or otherwise, the formula, or formulae, prescriptions, &c., of the medical remedies known as Dr. L. B. Tyson's Vegetable Cure for Drunkenness, and the Opium and Tobacco Habits, together with all rights and privileges relating to the manufacture and sale of the same in the United Kingdom and on the continent of Europe; to carry on business as drug and medicine vendors, wholesale and retail chemists, druggists, &c. The first signatories are:—

	Shares.
H. C. Stephens, Woodthorpe, Purley, Surrey	10
T. E. Stephens, 8, Paper-buildings, Temple, E.C. ..	10
W. Sturt, 32, King-street, Cheapside, E.C.	1
G. T. Stephens, Woodthorpe, Purley, Surrey	10
Mrs. M. L. Stephens, Woodthorpe, Purley, Surrey ..	10
Miss M. L. Stephens, Woodthorpe, Purley, Surrey ..	10
B. P. Burroughs, University Hall, Gordon-square, W.C.	1

There shall not be less than two nor more than five directors; the first to be elected at the first general meeting after the incorporation of the company. Remuneration as fixed at the general meeting.

CORRESPONDENCE.

To the Editor of FOOD AND SANITATION.

SIR,—With your permission I will give a brief reply to the letter of "Curiosity," which appeared in your last issue, although I consider his question is met in my previous article on Vinegar, in which I stated that *all grain can be malted*. This, as a matter of course, includes rice; and that it is entirely a matter of secondary importance what hydrolyst is employed, if it is afterwards eliminated, since it is the *goal*. Malt vinegar, which is sought, the means being only one of the factors. I also pointed out that in all cases it is in the interest of the manufacturer to obtain his vinegar free from any of the hydrolysts after it has accomplished the hydrolysis of the available grain constituent, this being the *goal*. The hydrolysis being ejected, what does it signify whether it is diastase or any other equally effective one? In fact, the presence of diastase in the finished vinegar constitutes a greater and more serious element of danger to its keeping qualities, and subsequent application to pickling, &c., than that possessed by some of the other hydrolysts. Now, if by the aid of scientific knowledge the maker is able to secure the desired hydrolysis of the grain by a surer and cleaner manipulation, I consider he should not have his honesty impugned; I hold he should be as free to avail himself of modern advanced improvements as the malster, who having discarded the old and obsolete ways of his grandfather, gets, by a process different in all its details, a superior article. There are other hydrolysts than diastase or sulphuric acid, all of which bring about, more or less, the same end, and when any of these are used to reduce rice or any grain, by "digestion," "cooking," or "melting," to malt sugar, which by fermentation and oxidation gives vinegar, I am most certainly convinced that the goal thus achieved by anyone of them is malt vinegar.

Yours faithfully,

EXPERT.

POWELL'S BALSAM OF ANISEED—FOR COUGHS.

Powell's Balsam of Aniseed—Coughs and Asthma.
 Powell's Balsam of Aniseed—Coughs and Bronchitis.
 Powell's Balsam of Aniseed—Coughs and Hoarseness.
 Powell's Balsam of Aniseed—Coughs and Lung Troubles.
 Powell's Balsam of Aniseed—Coughs.—Safe and Reliable.
 Powell's Balsam of Aniseed—Coughs.—Established 1824.
 Powell's Balsam of Aniseed—Coughs.—Refuse Imitations.
 Powell's Balsam of Aniseed—Coughs.—Sold by Chemists.
 Powell's Balsam of Aniseed—Coughs, Night Cough, Influenza.
 Powell's Balsam of Aniseed—Coughs—Relieved Instantly.
 Powell's Balsam of Aniseed—Coughs.—The Oldest Remedy.
 Powell's Balsam of Aniseed—Coughs.—Trade Mark.
 Powell's Balsam of Aniseed—Lion, Net, and Mouse.
 Powell's Balsam of Aniseed—1s. 1½d., 2s. 3d.

GUARANTEED ABSOLUTELY PURE.

Warranted to stand any Analytical test A natural product ensuring perfect digestion not possible in the various manufactured Aesthetic compounds

SICILIAN WINE VINEGAR.
 Can be supplied in bulk.
 Write for Samples and Price to Sole Proprietors:—
 72, Mark Lane, London, E.C.

READ & DIGHT.

THE PUREST OF ALL SCOTCH WHISKIES.

D. LENNOX & SONS

LONDON OFFICE :

41, PALL MALL,
S.W.

Bonded and
Bottling Stores

DUMFRIES,
N.B.



LENNOX'S WHISKY

36/-

42/- 48/-

PER DOZEN CASH.

Delivered within London
Carting Circuit, or Carriage
Paid to nearest Railway Station
in Great Britain.

Do not drink Blends of Malt Grain
and Potato Spirit.

Medical Men and Connoisseurs will find this the
perfection of an absolutely pure & wholesome spirit.

WHEAT PHOSPHATES Nourish Brain and Frame, Form
Bones, Teeth and Muscle, and Enrich the Blood.

FRAME FOOD DIET
Is the only Food
which contains the
WHEAT PHOSPHATES extracted from Wheat Bran, and is
therefore the most **NOURISHING** food in the WORLD.

For **INFANTS**: Developing Bones, Muscles, Teeth, Brain;

For **INVALIDS**: Restorative and Invigorating; retained by the
weakest stomach when all other food is refused.

For **ADULTS**: A Delicious Breakfast and Supper Dish;
Vitalises the brain and all the functions of the body.

1-lb. Sample in **HANDSOME ENAMELLED Box** sent free
on receipt of 3d. to cover postage (mention this Paper)

Sold by Grocers, Chemists, &c., in tins, 1 lb. at 1s., 4 lbs. at 3s. 9d., or
sent carriage paid by

FRAME FOOD CO., LTD., LOMBARD ROAD, BATTERSEA, LONDON, S.W.

PURE
YEAST

Trade
NG & SF
Mark

PURE
YEAST

Use 4 ozs. to 280 lbs. Flour, second turn in winter.

For doughing direct, and other methods of working, address—

W. HEPWORTH, Harwich, Essex.

Most powerful Yeast known.

SUPERIOR FLAVOUR. LONGEST KEEPING.

Highest Awards, Healtheries, London, 1884.

LONDON, 1893 (this Year).

LARGEST YEAST WORKS IN THE WORLD.

GRIMBLE'S PURE VINEGAR

Guaranteed BREWED and free from ANY ADDED ACIDS.

GRIMBLE & Co., Limited, Cumberland Market, London, N.W.

Chafed Skin, Piles, Scalds, Chilblains, Chapped Hands, Neuralgic, and Rheumatic
Pains, Sore Eyes, Ear-ache, Cuts, Sunburn, Insect Bites or Stings, Throat Colds,
and Skin Ailments quickly relieved by use of

CALVERT'S CARBOLIC OINTMENT,

Large Pots, 13½d. each, with full Instructions.

Court Circular says: "We cannot too highly recommend Calvert's
Ointment. It is the best general Ointment with which we are
familiar, and ought to be a stock remedy in every household."

Private report from Limassol Cyprus: "I have never found any-
thing to come up to it for neuralgic and 'Rheumatic Pains.'"

Samples sent Free by Post on receipt of value.

F. C. CALVERT & CO., MANCHESTER.

Awarded 60 Gold and Silver Medals and Diplomas.

FOOD & SANITATION,

THE ANTI-ADULTERATION JOURNAL.

A Journal for Manufacturers, Merchants, Wholesale and
Retail Traders, Grocers and Provision Dealers, Dairy
Farmers, English and Irish Produce Merchants and Bacon
Curers, Pure Beer Brewers, Distillers, Fruit Growers,
and Agriculturists.

PUBLISHED WEEKLY

BY

M. HENRY, at 183, STRAND, LONDON. W.C.

SUBSCRIPTION: PER ANNUM, POST FREE, 6s. 6d.

Food and Sanitation.

SATURDAY, DECEMBER 9, 1893.

THE MEAT MARKING COMMISSION.

Of Commissions we appear destined to have no end, which is
a great pity, considering the amount of twaddle they manage to
collect and print at great expense to the country. Some time
after the appointment of the Select Committee of the House of
Lords on the marking of foreign meat, we commented upon the
fact that as the reference to the Committee included other kinds
of imported food stuffs, it was the duty of the Committee to
take steps to obtain accurate evidence as to the extent of the
sophistication practised in various imported articles. The steps
they have taken would be laughable were they not so irritating.
They have not asked Public Analysts, who analyse for the large
produce importers, to give evidence, and they have asked only
one or two Food Inspectors; but a number of persons who know
very little about adulteration practically, and who have no analy-
tical experience worth naming—say nothing in many pages at
the public expense.

For example, Mr. James Long, of Romsey, Hampshire, who
somehow or other manages to be very much in evidence wherever
evidence is to be given, was one of the witnesses. He gave the
usual generic evidence, stating that very large quantities of
adulterated butter went to the best hotels in London, and to
eating-houses and restaurants, which is common knowledge to
the man in the streets. He revealed in transpontine melo-
dramatic manner the tremendous secret, that a large City firm
had the floor of their warehouses covered with hundreds, if not
thousands (there is a precision about this hundreds, if not thou-
sands, that charms us) of boxes marked "Pure Butter" and that
he traced the contents of one of these boxes to the dining-room
of the House of Commons. He is reported as saying:—

"That was marked 'Warranted pure butter.' I suspected it myself, from tasting it, and I went to see the merchant, to ask if he would kindly tell me where it came from. Of course, he objected to do that, and said I was quite wrong, it was a very pure article; but I gave him a sample, retaining some for analysis, and it contained 25 per cent. of margarine, which means considerably more, because a chemist cannot tell by any means within 10 per cent."

"There was a proposal brought before the French Chamber last year to make a change in the margarine law, but it was opposed vigorously by the Minister of Commerce, on the ground that if it was proposed that the colouring matter be omitted from margarine they would lose the British trade. I have the speeches in the debate with me."

That is to say, if margarine were imported without colour, it would not be bought by English people. Butter comes from various parts of the world, and the retail consumer has the least possible chance of knowing the real source of the article with which he is supplied, supposing he cared to know. There is Victorian butter as well as butter from Italy, Holland, Germany, and France. German butter is "heavily watered." Victorian butter has "a lot of preservative stuff in it," which remains there when the butter is offered to the public. This "preservative" ingredient is described as chiefly composed of "boracic acid and borax." Most of the butter which the public buy is said "not to be butter at all really." But the public are understood to care very little as to the place the butter comes from, so long as they think the article good. When asked what effect the adulteration of imported food is exercising upon the price of home products, the witness replied that, "As regards butter, it has simply demoralised the whole English trade, and it is destroying it by degrees."

Many people are probably unaware of the fact that a good deal of so-called "Cheddar" cheese is imported. Margarine enters into the composition of cheese as well as butter. In respect to milk, a person buying the home article has some reason to expect that it has been produced under sanitary conditions. But he is possibly buying the foreign article, concerning which he has no such assurance. Thus, Holland sends us milk; but while in England a milk store must not be used as a sleeping apartment, it is alleged that in Holland the cow-house is usually the sleeping apartment of the farmer, his family, and his workmen. It may be doubted whether the various requirements of the law as to the milk trade in England are duly enforced. But Mr. Long considers there is some satisfaction for the consumer in knowing that a certain order exists, though it is not universally enforced. Foreign milk is described as inferior in quality to the English. Dutch milk is "known to be inferior to almost any milk we have." It is not so yellow as that which comes from Guernsey or Jersey, "but it looks good sound milk." The importation of condensed milk is said to affect the trade in British milk somewhat seriously. There is reason to believe that condensed milk has a large sale, being apparently cheap. The purchaser mixes it with water, and thinks he economises by so doing. But it is asserted that "the milk contained in one of these one-pound tins does not exceed a half-penny in value," although the price charged per tin is from three-pence to fourpence. In fairness, the sugar in the condensed milk has also to be reckoned, and makes the contents of the tin worth a penny or a little more.

There is a very large importation of bacon and hams from America. The manner in which the American pigs are fattened is extremely disgusting. As to the curing of the hams a great many are known to be sugar-cured. In regard to these commodities, there is reason to conclude that it would be an easy matter for the hams to be branded, as the practice already exists to some extent, though not in such a way as necessarily to protect the English purchaser. On this point we read:—

"You are aware that under the Merchandise Marks Act any article imported into the country having a brand upon it that is calculated to mislead can be refused by the Customs? I am quite aware of that."

"These hams do not fall within that category? I do not think so."

"When is the brand applied; after it is landed? I could not say. If you see the mark of Denny, or any well-known British firm, on the back of ham or bacon, you at once recognise that it is of a high quality; but when you see bacon and ham with other brands, as it is sold by some other firms, with tickets describing it as 'best Irish' or 'best English,' you recognise that a fraud is being committed regularly, and the Merchandise Marks Act evaded every day."

The devices adopted by some butchers were forcibly exposed in the Committee's Report, but further particulars appear in the evidence. A large class of country butchers are supplied with American beef from Smithfield. How they deal with the public is thus described:—

"If you went into any of these butchers' shops in the country and asked if they sold American meat, they would say it is a thing they never do. They would not keep it. I can tell you an instance which happened in a town at the seaside. A woman went into a butcher's shop and said, 'I want some American meat for my joint for to-morrow because it is cheaper.' The butcher said, 'I have never kept American meat in my shop; I should not think of keeping it.' The woman said, 'Well, that is a very funny thing, because my husband is one of the salesmen in the Smithfield Meat Market, and sells you American meat, and he told me when I came down here to go and deal with you, because you were such an excellent customer to him.' I have no doubt there have been hundreds of cases of this kind if you could only know them. That is one case that has come under my personal observation, because I knew the man that supplied and the man that sold the meat."

Readers of our journal will be amused at the solemn manner in which the above is presented to the public as the report of the evidence taken by a Select Committee of the House of Lords. There is not a particle of information in it which has not already been printed in FOOD AND SANITATION without one halfpenny of expense to the country, while there is a great deal of information in FOOD AND SANITATION upon adulteration and sophistication of imported food stuffs, of which this Select Committee appears to have no knowledge whatever.

NOTICE TO ADVERTISERS.

The London Press Exchange, Limited, 183, Strand, are no longer employed as advertisement agents for FOOD AND SANITATION, nor are they authorised to transact any business for, or collect any monies on behalf of FOOD AND SANITATION. Accounts should be paid to M. Henry, FOOD AND SANITATION, 183, Strand, W.C., whose receipt only is valid.

MR. WILLIAM BROWN AGAIN.

The Public Analyst to the Fulham Vestry has again certified a sample of milk from the Farmers' Direct Association to be adulterated, and the Medical Officer of Health suggested that the Vestry should proceed by indictment. The solicitor advised that there would be difficulties in the way of proceeding by indictment, and a summons, under the Sale of Food and Drugs Acts, was applied for in the usual way. Proceeding; are also pending elsewhere against this gentleman. The chief proceeding, however, that will interest our readers is the following:—

W. BROWN, DAIRYMAN, MILE END, E.

A deed of assignment for the benefit of creditors has been executed by the above, trading as the Farmers' Direct Supply Co., Riga House, South-grove, Mile End; 52, College-place, Chelsea; 178, Liverpool-road, Islington; Swan-place, Old Kent-road, and 52, Gardners-lane, Putney, dairyman. The deed provides for the payment of a composition of 7s. 6d. in the pound by three equal instalments, at two, six, and nine months respectively, secured by securities. The unsecured liabilities amount to £1,312, and the assets are returned at £638. The following is a list of the principal creditors:—

	£	s.	d.
Potter, J., Ashbourne	11	0	0
Richardson, T., Ashbourne	20	0	0
Taylor, G., Barnet	18	0	0
Child, R., Bicester	32	0	0
Edgar, T., Bridgewater	24	0	0
Jackson, E., Burton-on-Trent	31	0	0
Hunt, W., Derby	18	0	0
Dean, J., Etwell	57	0	0
Summerfield, J., Etwell	58	0	0
Wallis, C., Etwell	16	0	0
Edwards, F. C. J., Hampstead-road	18	0	0
Adams, J. W., Leighton Buzzard	133	0	0
Barton, J., Leighton Buzzard	54	0	0
Hedges, T., Leighton Buzzard	32	0	0
Pfaff, Steddal & Co., London	21	0	0
Robertson, W., London	41	0	0
Schwartz, S., London	123	0	0
Watson, G., Lutterworth	35	0	0
Hayward, E. W., Norwich	38	0	0
Deeley, H., Northampton	58	0	0
Nicholls, S., Northampton	32	0	0
Spence, Norwich	27	0	0
Archer, S., Badbourne	28	0	0
Walwyn, J. N., Radbourne	78	0	0
Blacket, C., Rugby	42	0	0
Sastell, R., Rugby	97	0	0
Goodman, T., Rugby	81	0	0
Whiting Bros., Stoney Stratford	18	0	0
Bunting Bros., Tissington	10	0	0
Ford, F., Warksworth	14	0	0

The last heard of this vendor up to the moment of going to press is that he appeared at Clerkenwell on December 6th, summoned, at the instance of the Islington Vestry, for selling a pint of milk which was found, when analysed, to be deficient in cream to the extent of 85 per cent. The defence set up was that the milk was sold as skimmed milk. Mr. Lewis, who prosecuted, stated that the defendant had been convicted several times, and had paid fines amounting in the aggregate to over £3 0. Mr. Horace Smith inflicted a fine of £20 and 20s. costs. A second summons charged the defendant with selling skimmed milk adulterated with 6 per cent. of added water, and a fine of £5 with 2s. costs was inflicted.

When we began this journal sixteen months ago, Mr. William Brown and other vendors of adulterated milk had everything their own way. That the case is different to-day, the evils of adulteration are becoming more fully recognised, the Acts being more energetically enforced, and a really serious attempt is being made to give fair play to the honest vendor—these are all public benefits for which we can honestly take the credit to ourselves. The increase in the number of samples taken for analysis, which at the present time is fully fifteen per cent. greater than it was when our journal entered upon its campaign against adulteration must also be placed to our credit. We are content to let these benefits weigh against any faults which a few captious critics find with our advocacy of honest trading.

A REVELATION FOR ADULTERATORS.

The Medical Officer of Health for Fulham is evidently of opinion that fining for adulteration is proving inadequate to prevent a notable culprit, who has been frequently convicted in London for selling watered skim milk as pure, from imposing on the people of Fulham under his charge. He urged his Board to lock up the culprit and proceed by indictment. Of course you can, said he, in reply to the queries of the surprised ones. On reference to the Act we find that Clause 28 says, "Nothing in this Act contained shall affect the power of proceeding by indictment or take away any remedy against any offender under this Act." So the trade may yet see strange things done under indictment; the offence is criminal, fraud. Now, where a case is ripe for proceeding by indictment would be, we imagine, a rascal would buy consignments of skim or separated milk, mix it proportionately to pay him with watered new milk in the presence of a witness, and sell it as new milk at any price. Now it ought not to be difficult to secure the evidence required for proceeding by indictment when scores of churns of skim milk are received by dealers who only sell new. The difficulty ought not to be insuperable, and the culprit may find, too late at last, perhaps, that his greatest enemies are those of his own household. Every day, however, brings us nearer to the consummation desired, that the honest dealer shall have security against illegal and fraudulent competition.—*Cowkeeper and Dairyman's Journal*.

THE MAGISTRATES AND THE ANALYST.

At Swanlinbar (oc. Cavan) Petty Sessions, held on 14th November, 1893, Messrs. Tyrrell, Trimble, and Gileece, J.P.'s, presiding, Sergeant T. Carberg, R.I.C., and F. and D. Inspector, summoned Ned Magovern for selling butter containing excess water. The sergeant deposed to purchasing a sample of butter from Magovern in the public market at Swanlinbar on 30th September, 1893, and forwarding it to Sir C. A. Cameron, Public Analyst, from whom he received on 15th October, 1893, a certificate stating the result of his analysis as follows:—"I am of opinion that the said sample (which was in a proper condition for examination when received) was butter, which was adulterated with an excessive amount of water—namely, 18·44 per cent., 16 per cent. being the maximum that ought to be permitted, and even that being unnecessarily large." A summons was issued in accordance with the certificate, but the Justices dismissed the case because they could not understand why the Analyst could allow 16 per cent. of water and certify for a prosecution for 18·44 per cent. They would not convict on such discretionary powers unless they could find out the law that authorised him (Analyst) to fix the standard in such a case. This was the first prosecution of the kind in the locality.

WEIGHING PAPER WITH GOODS.

Recently, correspondents have asked us whether it is legal to weigh paper with an article sold. If by the word "legal" is meant: "Is it fraudulent or not," then, on the authority of Harris v. Allwood, we should say there can be no fraud. But if the meaning of the word is intended, "Is it safe as between 'vendor and purchaser to weigh paper,'" then one must enter rather more deeply into a consideration of the subject.

We must now return to a consideration of the object of all the statutes dealing with weights and measures. As we have before said, one of the objects of the Legislature in passing the various Acts, was to protect the public against short weight or measure. If, therefore, a person intending to purchase a pound of sugar, purchases, instead 15oz 6drs. of that article and 10drs. of paper, he clearly does not get what he intended to buy. If it were always the practice to weigh the wrapper or cover with the thing sold, then why not calculate in the weight of the article the boxes in which bacon and other commodities are sold, or the sacks or cases in which numerous articles of produce are brought to and sold in this country? The effect would be the same in kind, but not in degree, as that of selling the sugar wrapper as part of the sugar. But then there comes the question: Would the Court convict in a case of this sort upon a charge of giving short weight? We incline to the opinion that it would not. As was said in the statement of the case in Harris v. Allwood, the purchaser took no paper or vessel in which the articles purchased could be taken away, was aware that it was the practice of grocers to weigh the paper with the article purchased, and made no protest on this occasion against the practice. Here we think is the crux of the whole question. A grocer is not bound to provide a wrapper for any article which he sells. As a matter of fact, he of course does so for the convenience of himself and his customer. But if a customer should be so obstinate as to refuse to take the article weighed with the wrapper, or raise a protest against the paper being weighed with it, then the duty of the shopkeeper is plain. He must in that case weigh the article without the paper, and leave it to the purchaser to take it away as best he can.

We believe that a good deal of misapprehension has existed about the decision in Harris v. Allwood. We would only impress upon our readers the consideration of this fact, that Harris v. Allwood was a criminal proceeding taken against a dealer for an alleged fraud. The decision of the court was that, in following out so well-known a practice as weighing the paper, the defendant had not been guilty of any fraud, and the case went no further than this. It did not in any sense authorise the weighing of paper with an article sold, and if a protest should be raised by a purchaser against such a course, then, as we have said, the retailer must deal either in the manner we have suggested, or refuse to supply the goods on the purchaser's terms.—*Grocer's Review*.

REVELATIONS IN MEAT INSPECTION AT LIVERPOOL.

It would appear from the following case that meat which is found at Birkenhead to be diseased and unfit for human food would be regarded as quite good enough for the people of Liverpool. This discloses a condition of things which those responsible for the public health of Liverpool ought to subject to searching examination.

On December 2nd the adjourned hearing of the application came before Alderman Willmer, at the Police Court, Brandon-street. On the previous day it was stated that the Meat Inspector had seized four pieces of beef that morning at the shop of William Dale, 42, Watson-street, and evidence was given by the Meat Inspector and by the Medical Officer, Dr. Marsden, to the effect that the meat was tuberculous, and therefore entirely unfit for the food of man. Mr. J. T. Thompson appeared for Mr. Dale, and stated that the meat had only just been bought at the Liverpool Abattoirs, where it was passed by an Inspector. He thought it strange that meat should be passed in Liverpool and condemned in Birkenhead. He asked for an adjournment, and the request was granted. Mr. Bromfield again appeared for the Corporation and Mr. Thompson for Mr. Dale on Saturday. Mr. Bromfield said that since the previous day facilities had been given Mr. Dale to bring his witnesses to examine the meat. He had considered that it would be well to place independent evidence before the Court, and he therefore proposed calling Dr. Vacher and Professor Barron, who had seen the meat, and would speak as to its condition. Dr. Vacher was then called. He stated that he had written pamphlets and a book on the subject of meat and its conditions, and he had made a study of meat in the condition of the meat in question. In his opinion, such meat was liable to cause tuberculosis in persons who were liable to contract such a disease. He had no doubt that the disease could be communicated, although he quite admitted that a person might eat the meat, if it was properly digested, without sustaining any harm. But the meat would have to be well cooked, and the bacilli destroyed. He had inspected the pieces of meat which Mr. Wagstaffe had seized and he believed that in many parts the pleura had been deliberately stripped off, in those places there were many deposits of tubercle visible on the bone. His idea was that the whole carcass must have been impregnated with tubercle. He considered that the animal had suffered from the disease for some time, and that disease generalised throughout the system. In his opinion, the flesh was quite unfit for the food of man. Examined by Mr. Thompson he said he did not think there was much difference of opinion as to the effect of tuberculosis on the human subject. In reply to further questions witness said that in the four pieces of meat which he had seen there were distinct indications of the disease, and he had no doubt that if there had been more pieces of meat in the shop, the Inspector would have seized them. His belief was that the disease would affect the whole carcass, but he did not know that the greater portion of the carcass had been used. Professor Barron, professor of pathology at the University College, Liverpool, deposed that he had inspected the four pieces of meat, in each of which he found nodules of tubercle. There was a considerable amount of tubercular material still left on the bone, although the greater part of the pleuro membrane had been cut off. In his opinion the animal had suffered from generalised tuberculosis, and the tubercle had become disseminated throughout the various parts of the body. Dr. Henry Laird Pearson, T.O., was also called, and gave corroborative evidence as to the presence of tubercles in the pieces of meat seized. Mr. Thompson called Inspector Renton, of Liverpool, who stated that, in company with Inspectors Luya and Jones, he had inspected the carcass from which the four pieces of meat seized had been taken. They found on the outside of the lungs certain tubercles, but they were quite hard. Inside, the lungs were quite clean. They considered the animal was quite fit for human food, and passed it. His experience was that whenever it was discovered that the tubercles were hard, the carcass was wholesome: but if it was found that the tubercles were soft and cheesy, the carcass was condemned. In cross-examination by Mr. Bromfield, witness said that he considered the animal had suffered from pleurisy. The lungs had, to some extent, grown to the ribs. He would have no hesitation in eating the meat which had been seized after the tubercles had been cut off. He believed the disease had not become generalised, notwithstanding the fact that the tubercles were present in some of the glands. When he inspected the meat along with Inspectors Luya and Jones, he opened two glands in the hind quarters and one in the fore quarters, but found no tubercles. Mr. Bromfield inquired what were the instructions in Liverpool as to the inspection of meat. The witness answered that when they seized a carcass they placed it in their dépôt, where it was seen by the medical officer of health, but the medical officer was not in the habit of seeing carcasses before they were placed there. Inspector Jones was next called, and his testimony was corroborative of that given by the last witness. Mr. Parker, of the firm of Parker and Fraser, wholesale butchers, of Liverpool, said the carcass was that of a Yorkshire cow. It was a young animal, and, in his opinion, the meat was of fair quality for a cow of that description—it was not first-rate meat, but the quality, as he said, was fair. He considered it was quite fit for human food. Alderman Willmer here intimated that he was satisfied that the flesh was diseased, and not fit for human food, and he had no alternative but to make the order applied for. Mr. Thompson: Your Worship finds this meat diseased and unfit for human food? Alderman Willmer: Diseased and unfit for human food. Mr. Thompson: And you make the order? Alderman Willmer: Yes.

THE MATTEI CANCER CURE SWINDLES.

Medical men and others who know of persons who have been victimized by the Mattei Cancer Cure Swindles, will greatly oblige by communicating with

E.K., c/o Food & Sanitation,
183, Strand, London, W.C.

REASONS FOR A RE-INVESTIGATION OF THE MAYBRICK CASE.—II.

Looking back at the case in the light of the discovery accidentally made by us as to the utter worthlessness from a food point of view of Valentine's Meat Juice, which appears to have been for some period prior to his death the "food" given to the unfortunate sick man, it is easy to see now how grave an error was made by those concerned with the case in not having each article used by the patient thoroughly analysed. Had such been done, there is little doubt that a judgment very different from that given would have been the outcome of the trial. It would have been found that the causes to which Maybrick's death were ascribed were more likely the result of want of proper nutriment than of the small amount of poison discovered at the *post-mortem*—in fact the symptoms disclosed would be much more likely to follow a severe attack of gastritis, succeeded by a practical deprivation of food such as was the actual case with the sick man. There is no doubt that it was believed by Edwin Maybrick, and by those attending James Maybrick, that Valentine's Meat Juice was the concentrated quintessence of nutriment, sufficient of itself to sustain life when administered in minute doses, which, until our discovery, was the belief of the bulk of the medical profession. It apparently suggested itself to no one surrounding James Maybrick, that by usurping his wife's place at James Maybrick's bedside, withholding from the patient the nutritious food his wife had been in the habit of giving him, and substituting Valentine's Meat Juice, they were *slowly starving the sick man to death*. STARVATION is what medical science would reveal as the cause of James Maybrick's death, should a re-investigation of the case take place. How this occurred, our readers will readily perceive by a study of the composition of the food James Maybrick got:—

VALENTINE'S MEAT JUICE.

Water	55.24
Fat (Ether Extract)	4.80
Gelatine and Albuminoids	0.93
Peptone	1.55
Creatine and Meat bases	18.27
Salt	2.62
Other Mineral Matters	8.51
Non-Nitrogenous Extractives	8.08

100.00

As will be seen, this analysis reveals the fact that Valentine's so-called "Meat Juice" is not a meat juice pure and simple at all. It contains but 2.48 per cent. of peptone plus albumen, and 18.27 per cent. of meat bases, showing most conclusively that it is not meat juice—if it were the proportions would be entirely reversed. One can fancy that chamber with its invalid fighting death, his amateur physicians depriving him of all nourishment, but this trash administered in minute doses by well-meaning persons who believed it was the best of all nourishing foods for the invalid because it was the *dearest*, no one knowing that James Maybrick would have to swallow a gallon or more per day of the "juice" to get sufficient nourishment to sustain life. When our readers reflect upon the fact that the gelatine and albuminoids, that is, the nutriment, actually present in the food is less than 1 per cent., but that along with this less than 1 per cent. of nutriment there is some 18½ per cent. of creatine, meat extractives, etc.—practically valueless, except as a slight stimulant—the only effect of which would be to throw upon the kidneys of a man who had been suffering from dyspepsia, and was suffering from starvation, the work of getting rid of this extra quantity of rubbish; they have truly a pretty picture of how to sustain the strength of a patient "sick unto death."

A re-investigation, even now, with the medical and chemical evidence thoroughly gone over anew, would, we have no hesitancy in saying, show that James Maybrick's death was more likely the result of starvation and deprivation of the arsenic to which his system was accustomed than of malpractices by Mrs. Maybrick. Indeed, at the *post-mortem*, Dr. Humphries said that the actual cause of death was exhaustion. What produced that exhaustion is now, thanks to our analysis, at last made public. The burning anxiety of those who suspected Mrs. Maybrick to fasten guilt upon her, and the means by which those conducting the *post-mortem* were led to suppose that the gastro enteritis had been set up by some irritant poison, is demonstrated clearly by the following facts, sent to us by another correspondent.

DEAR SIR,—

Mrs. Maybrick's statement as to the bottle of Valentine's meat-juice seems to be relied on as almost conclusive evidence of her guilt—at least as regards the attempt to murder—and is supposed to have

chiefly influenced Mr. Matthews in passing a sentence which is second only to death. May I ask space for expressing my total dissent from this view of the question?

The facts are these. Mr. Edwin Maybrick gave Nurse Gore a bottle of Valentine's meat-juice (which had not been ordered by the doctors) for his brother's use. Nurse Gore seems to have left it for a whole day on the landing, but states that it appeared fresh and unopened when she used it on the night of May 9. Mrs. Maybrick protested against its use, as it had made her husband sick before, but of course nothing that she said at this period was attended to. Nurse Gore administered two tea-spoonfuls of it diluted with water. What nutriment Mr. Maybrick was likely to derive from this the readers of FOOD AND SANITATION are aware. Nurse Gore said it produced no ill effects, but if the arsenic was in the bottle at this time the two tea-spoonfuls would not have contained more than about one-fifth of a grain of arsenic, and it appeared from the nurses own evidence that within two hours at furthest Mr. Maybrick awoke complaining of a burning sensation in his throat and vomited. Why was not the vomit kept and analysed? It would have been if Mrs. Maybrick had the bottle in her hands before it was administered. Soon after this, according to Nurse Gore, Mrs. Maybrick took the bottle stealthily into the dressing-room, and after about two minutes' absence stealthily replaced it on the table at the bed-side. She tried to induce Nurse Gore to leave the room for some ice, but the latter did not go. Mrs. Maybrick then went to lie down, as her husband was asleep. If I recollect rightly, it appeared either on the inquest or the magisterial inquiry that she told the nurse to call her when her husband awoke. The evidence was not, of course, as fully gone into at the trial as if there had been a substantive charge of attempt to murder—a fact which placed Mrs. Maybrick at a serious disadvantage with reference to the subsequent action of the Home Office. At all events, Nurse Gore did call her, and on returning to the room she immediately took the bottle of meat-juice off the table and placed it on the washstand, where it was out of Mr. Maybrick's sight and reach, and not likely to attract the attention of the nurse unless the latter was playing the part of a detective. It seems clear that she could not have placed it there with the intention that the nurse should administer it. It remained on the washstand for over twelve hours. During that time she not only made no attempt to administer it herself, but made no suggestion either to Mr. Maybrick or to Nurse Gore or Nurse Callery that he should have any of it, though during the interval she was almost constantly in the room. In the afternoon of May 10th, Mr. Michael Maybrick, who had previously charged her (to the doctors) with poisoning her husband, took it away, and some two hours later he gave it to Dr. Carter. It was subsequently analysed for arsenic—no other powder, such as strychnine or nux vomica, seems to have been looked for—and it was found that half the bottle contained half a grain. Some person had therefore put into the bottle an amount of arsenic not exceeding one grain, the smallest fatal dose on record being two grains. Mr. Davies was further of opinion that the arsenic was in solution when introduced, and three days later a bottle of arsenic in solution was found in one of her husband's hat-boxes in the dressing-room to which Mrs. Maybrick had retired.

Mrs. Maybrick's statement was as follows. Her husband urged her to give him a powder which he was in the habit of taking, and at last she reluctantly consented. Having found the powder (in the place indicated by her husband) she took the meat-juice and powder into the dressing-room, being unwilling to mix them in the presence of the suspicious and not very civil nurse. Having accidentally spilled some of the meat-juice, she put in some water instead, and then replaced the bottle at her husband's bed-side. But as he did not ask for it when he awoke, and she was not anxious that he should take it, she took an early opportunity of placing it out of his sight and reach, and so left it. When she heard that arsenic had been found in it by analysis she concluded that the powder which she put in was arsenic.

What is there of an incriminating character in this statement? If she put in a powder, it was not arsenic but something else that may still be found in the bottle. If she did not put in any powder, no doubt every untruth that a prisoner tells in such cases damages him or her; but why should this untruth damage her more than any other? For my own part I doubt if any jury would convict the prisoner upon the result of any analysis of the bottle, when it appeared that it had been for two hours in the possession of her accuser before it was analysed—though no doubt he swore that he did not tamper with it. But why did he not simply leave it on the washstand until Dr. Carter came, and allow the latter to remove it?

The main question, however, is—Do these facts reveal any attempt to murder in the legal sense? I think not. Mrs. Maybrick may have been only waiting for one of the nurses to leave the room in order to make the attempt, but the nurse did not leave the room, and the attempt was not made. Even if she tried to induce Nurse Gore to leave the room in order to obtain an opportunity of administering the arsenic, this would not amount to an attempt. If she had loaded a pistol with the intention of shooting her husband as soon as the nurse left the room, and had tried to induce the nurse to leave the room in order to obtain an opportunity of firing, this would not amount to a criminal offence. The attempt to murder would require an attempt to fire. Granting that what she put into the bottle was not a powder, but arsenic in solution—that she put it in with intent to kill her husband—and that she watched for hours for an opportunity of administering it, but in vain—there would still be no legal offence. I am far from thinking that such was the fact. But does the Home Office punish people for what is no offence in point of law?

It will be seen that Mrs. Maybrick protested against the use

of Valentine's Meat Juice, which Mr. Edwin Maybrick had given to Nurse Gore, because it had made her husband sick before, which, considering the nature of his illness and the composition of the articles in question, is not to be wondered at. It would be interesting to know how it came about that Mr. Edwin Maybrick gave Nurse Gore this bottle of meat juice for his brother's use. Our analysis of the preparation and the facts we have given clearly prove—and we are certain that a reinvestigation of the Maybrick case would corroborate our proofs in every detail—that the cause of Maybrick's death was not poisoning, but absolute starvation, caused by real nourishing food being kept from him; and this trash, provided by the amateur physician, Mr. E. Maybrick, innocently enough, we have no doubt, and without any knowledge whatever of its suitability for the invalid, may more likely than not have been the actual cause of James Maybrick's death.

Independently altogether of the terrible issue involved—namely, that in the light of these discoveries there may have occurred a grave miscarriage of justice, and that an innocent woman may be wearing out her heart in silent misery, immured in a prison, suffering punishment for an imaginary crime, there is the further grave question. We have shown how dangerous and how unsuspected drug adulteration is, yet in the last year only 702 samples of drugs were taken for analysis, and one-sixth of these were returned as adulterated. This, at present, is the whole protection the public have against accidental poisonings by drug adulteration such as was revealed in the analysis made by Sir C. A. Cameron, of the packet of Glauber Salts, wherein 8 grains of arsenic per pound was found to be present, totally unsuspected. Of these 702 drugs analysed, the bulk would, no doubt, be tincture of rhubarb, spirits of nitre, and paregoric, as of general drugs no samples whatever are taken for analysis ordinarily by Food and Drugs Act Inspectors, and no prosecutions ever take place. Drug adulteration, deadly or otherwise, may prevail to any extent, and is at present absolutely uninterfered with. There are few chemists who have the knowledge, even if they had the appliances, necessary to test the purity of the drugs they deal in, and fewer still who would take the trouble to make analyses for their own satisfaction of the multitude of drugs they vend. It is thus left to the manufacturer to be honest, or careful, or otherwise, just as he pleases. How dangerous this is to the public, and how it may lead to terrible miscarriages of justice our columns have shown over and over again. In any case, in the light of the facts we have given, a very grave doubt is raised as to the justice of the verdict in the Maybrick case, and the necessity is amply shown for a re-investigation of it. If such a re-investigation should prove that Mrs. Maybrick did poison her husband, no one will quarrel with the sentence of life-long imprisonment, but for our part, having an entirely open mind upon the question, and concerned solely as we have been with the chemical discoveries accidentally the outcome of our analyses—as far as we can judge, there is very little to show that Mr. Maybrick died of poison; but there is a great deal to prove that he died of starvation, and that it was not Mrs. Maybrick who starved him to death.

We append a batch of testimonials as to the value of Valentine's Meat Juice from the *Lancet*, the *Practitioner*, the *Atlantic Journal of Medicine*, and the *Virginia Clinical Record*. It is time the editors of these journals offered some explanation to the medical world as to how these testimonials came to be written and inserted in the journals for which they are responsible, as our analyses show them to be utterly misleading and devoid of one shred of foundation at the present day. Yet they are sent out with every bottle of this so-called Meat Juice. They are as follows:—

"**VALENTINE'S PREPARATION OF MEAT JUICE.**—Not only is the flavour of the meat admirably preserved, but the albumen of the juice is retained in perfect solution, as is proved by the ease with which it coagulates on boiling or mixture with dilute nitric acid. The preparation, is therefore, most valuable both as a stimulant and food, and we have no hesitation in recommending it highly.—*The Lancet* (London) December 28, 1878.

"**VALENTINE'S MEAT JUICE.**—This preparation, as its name implies, is the juice of meat expressed by a powerful hydraulic press. Unlike simple extracts of meat, it contains a large quantity of albumen in solution along with some hæmoglobin. Altogether, we think that this Juice will be of great service to the physician as affording a concentrated and easily assimilated form of nutriment.—*The Practitioner* (London) June, 1878.

Editorial from *Atlantic Journal of Medicine*, October, 1883.—"What patients and physicians need is a fluid holding in solution the nutritious principles and salts of the beef—a concentrated, fluid extract of meat, which will, alone, not only sustain life, but afford material for strengthening the patient, and at the same time be welcome to the most delicate stomach. . . . Our senior editor bears witness to the adaptability of VALENTINE'S MEAT JUICE to yellow fever patients, whose digestive organs are, we might say, entirely incompetent to perform their functions."

Editorial *Virginia Clinical Record*.—"We can, from a fair experience of this preparation, recommend it to the profession as possess-

ing all of the qualities requisite in a concentrated form of nourishment, without the unpleasant taste which belongs to those we have hitherto been using. Mr. Valentine has conferred a great boon upon us by making his essence pure and strong, and yet so palatable that the most delicate stomach will not be offended by it."

We may say that these are only a small portion of the testimonials given for this preparation, as the vendors publish some hundreds of others purporting to be testimonials of men holding pre-eminent positions in the medical and chemical worlds.

MARGARINE PROSECUTION.

At Stambourne, George Chatters, 74, grocer, was charged with selling margarine for butter, on Oct. 25th. Inspector Robinson asked to be supplied with half a pound of butter. Defendant's wife served him, and he paid 6d. Mr. Pooley, the County Analyst, certified that the article he received consisted of 72 per cent. of fat other than butter. Defendant's wife said she was worried at the time the inspector called, and forgot to tell him it was a mixture. She bought it as a mixture from the wholesale people. The Chairman said that people in business would have to carry it on honestly. The costs of the court would be remitted, but defendant would have to pay other costs, amounting to £1 15s. 11d., and a fine of 10s. Defendant: That will ruin us. I am as innocent as a child. We bought it for 11d. per pound, and sold it for a shilling—a penny profit.

MILK ADULTERATION AT ROTHERHAM.

At Rotherham Borough Police-court, on November 30th, John Houghton, of 50, Kimberworth-road, was summoned for selling milk deprived of one-third part of cream or better fat. Mr. Hickmott (Town Clerk) prosecuted, and stated that Mr. C. E. Parkin, Inspector, bought a quantity of new milk from the defendant for analysis. The certificate of the Public Analyst was to the effect that one-third of the cream or butter fat had been taken from the milk by skimming or other means. The defendant said he sold the milk as he got it from Mr. Hatfield, Morthen, and thought it was pure. He had no warranty. He had since given up the business. Fined 2s. 6d. and costs.

VINEGAR.

At the Hertford Borough Petty Sessions the adjourned summons was heard against Messrs. Hudson E. Kearley and Gilbert E. Tonge, trading as the International Tea Company, at Hertford, for selling vinegar not of the nature, substance and quality demanded. At the first hearing of the case, owing to the evidence of the Analyst to the County Council being contradicted by two Analysts called for the defence, the case was adjourned for the purpose of allowing the third sample retained by the police to be sent to Somerset House for analysis. The result of the latter analysis proved that it contained no pyroligneous acid; that the acetic acid present was derived from the acetification of alcohol produced by fermentation in the manufacture of the vinegar; and that the sample corresponded to a commercial vinegar made from malt. The bench dismissed the case, and decided that the prosecutors should pay the court fees, amounting to £1, together with 10s. 6d. for the Analyst's certificate, and £5 5s. towards the defendants' costs. They were quite aware that £5 5s. did not represent anything like the actual costs, but as the object of the police courts was that justice should be administered to parties inexpensively, they thought it was a fair amount to award.—Mr. Beard, counsel for the defendants, said that if the case had cost them a penny it had cost them £100. They did not want a certificate to tell them they were selling wholesome vinegar. Messrs. Beaufoy & Co. were the manufacturers of the vinegar.

EXCESS WATER IN BUTTER PROSECUTION.

At Abbeyfeale Petty Sessions, on November 23rd, Sergeant Rowley summoned Eliza Collins, for selling butter which was not of the nature or quality demanded by the purchaser, on the 16th, ult. Sergeant Rowley gave evidence of the purchase, and produced a certificate from Sir C. A. Cameron, certifying the samples forwarded to have contained 19.8 per cent. of water, 16 per cent. of which would be in itself excessive. Mr. D. Leahy, solicitor, represented the South of Ireland Butter Association. Mr. O. J. Curtin, solicitor, defended, and said the percentage in excess was very little. Some of the leading buyers themselves thought 20 per cent. would not be excessive. He asked the Bench to reserve their decision until the case, which was soon to be decided in the Queen's Bench in England, had been heard, which would in future govern cases of the kind. Defendant, examined, said she was unable to manufacture butter with a less quantity of water than she added. Her butter had always obtained first quality, and even that firkin was sold as such. A fine of 10s. was imposed.

MILK ADULTERATION AT DUBLIN.

At Dublin, on November 30th, Inspector Lyons prosecuted James Finlay, 1a, York-st., for having sold new milk which was adulterated with 17 per cent. of water. The defendant was fined £2. The same Inspector also prosecuted Bridget Healy, 120, James-st., for selling buttermilk adulterated with 60 per cent. of water over and above the amount allowed for churning purposes. A fine of forty shillings was inflicted in this case. Mrs. Carroll, Moss-st., for having sold adulterated new milk, was fined £1. Mr. McSheehy Law Agent to the Corporation, prosecuted.]

MORE PECULIAR SOMERSET HOUSE CERTIFICATES.

The following case, with the accompanying Somerset House certificate, is of importance to Inspectors and retailers.

At Enniskillen Petty Sessions on November 27th, the adjourned cases of alleged adulterated vinegar were heard. Sergt. Sheridan, Inspector, under the Food and Drugs Act, charged Mr. Joseph Hackett, High-street, with selling as vinegar an article which was not vinegar within the meaning of the Act. Mr. C. E. R. A. Irvine (Alexander & Irvine) who appeared to prosecute in all the cases, said the sample received from defendant which had been sent to Sir Charles Cameron, Public Analyst, for analysis, had afterwards been sent to Somerset House for analysis, when it was found that the article contained 3.58 per cent. of acetic acid. It was further stated that the article was artificial vinegar and not pure vinegar. Mr. Carson: That's a confirmation of Sir Charles Cameron's certificate. Mr. Irvine: Yes, it is. Mr. Carson: And it has been held that acetic acid is not vinegar. It was intimated that the case of Sheridan v. Elliott would not be proceeded with now, as Mr. Falls, who was engaged in the case, could not attend. Mr. Hackett thought all the cases should be adjourned. Mr. Irvine said the result of the analysis in Mr. Elliott's case was different from the others. This case was accordingly adjourned. In the case of Sheridan v. Quinn the result of the Somerset House analysis was that the article was not vinegar but merely acetic acid, and that it contained 4.92 per cent. of adulterated acetic acid. In the case of Sheridan v. M'Elgunn the result of the Somerset House analysis was that the vinegar was merely diluted acetic acid, that it was one of the artificial vinegars, and that it contained 3.6 per cent. of acetic acid. Mr. Carson thought it a great shame for the manufacturers to treat the traders in this way, leaving them liable to be brought into court and fined for no fault of theirs. After hearing the whole evidence, their Worships fined the defendants in 5s. each and 12s. 6d. costs.—Sergeant Sheridan charged Elizabeth Morrison, Darling-street, with selling as white wine vinegar of the finest quality, and of great strength, an article which Sir Charles Cameron certified was adulterated with .515 per cent. of sulphuric acid, an article which was not necessary in the preparation of vinegar. Mr. Irvine said he need hardly tell their Worships that sulphuric acid was a most virulent poison. Mr. G. A. Bird, solicitor, who appeared for defendant, said his client knew nothing at all about the matter, and that on writing to the manufacturers, apprizing them of the occurrence, they had written back to say that sulphuric acid was necessary in the saving of vinegar. Mr. Irvine: Well, Sir Charles Cameron's certificate is different. Mr. Bird: I always understood that sulphuric acid, until lately, was used in the manufacture of vinegar. Mr. Irvine pressed for a heavy fine, as the retailer could recover every penny of the fine and costs off the manufacturer. Mr. Carson: I would be very glad to see the manufacturers brought into court and condemned for selling this article to the retailers. The Chairman: It's a monstrous thing to adulterate vinegar with sulphuric acid, so we have decided to strike a fine of £5 and costs, or in default two months' imprisonment.

(Copy of Certificate.)

The sample of vinegar marked "Joseph Hackett, High-street, 19:7:93," was received here on the 25th ultimo, securely sealed.

We hereby certify that we have analysed the same, and declare that it contains 4.58 per cent. of acetic acid, and we are of opinion that the sample consists of acetic acid diluted, and that it is one of the artificial vinegars of commerce.

As witness our hands this 20th day of November, 1893.

(Signed) J. BELL, D.Sc., F.R.S.

R. BANNISTER, F.I.C., F.C.S.

JAS. CAMERON, F.I.C.

We direct our readers attention particularly to the phrase "one of the artificial vinegars of commerce."

Anything more carefully calculated to lead Magistrates, Inspectors, and retailers astray it would be hard to find in certificates. If the substance was not vinegar why did not the Government Analysts say so plainly. It seems impossible for these officials to do anything in a manner that can be understood by those concerned with the working of the Food and Drugs Acts.

THE WILTSHIRE COUNTY COUNCIL AND MILK.

At the last meeting of this Council, Mr. Withy stated that "At the present moment the standard of milk was an arbitrary standard, and there was a difference between the authorities at Somerset House and the Analyst's Society."

He would give the Council a case in point and an authority for his remarks. Some milk was taken from a cow by direction of the authorities at Somerset House, and it was found upon analysis to contain more than $7\frac{1}{2}$ per cent. of water. He was quoting this from a book which was an authority—a book which was the magistrates *vade mecum*, so to speak, and one which was often used and referred to by advocates in these cases. This case showed that even when the best authority took every precaution to find whether the milk was pure they found $7\frac{1}{2}$ per cent. of water.

We are becoming weary of pointing out that there is not a scrap of foundation for the above statement. We challenged those concerned with the "8 per cent.

of water herd of cows" which Mr. Lloyd alleged showed on analysis that percentage naturally present in the milk, to make the figures of the analysis public. As those concerned refuse to divulge the analytical figures, we adhere to our view that such was impossible. As to the Somerset House allegations, those who remember the examination we made on May 27th last of the Somerset House milk analyses are aware that we proved those analyses inaccurate and unscientific to an astonishing degree. Before County Councillors seek to interfere with the operation of Acts designed to protect the public from fraud, they ought at least to know what they are speaking about. Such, as far as we can gather from the report before us, was not the case at the above meeting.

ALLEGED CHAMPAGNE FRAUDS.

Mr. Joseph Webster, the proprietor of the Red House Hotel, Park-road, St. John's-wood, appeared at Marylebone Police-court, last week, to answer a summons charging him with having, on October 10th and 17th last, sold several bottles of champagne, affixed to which were labels purporting to show that the wine had been manufactured, corked, and labelled by Messrs. Perrier-Jouët and Co., of Eperney, which was false, and contrary to the Merchandise Marks Act. Mr. Charles Mathews, barrister, prosecuted; and Mr. Horace Avory, instructed by Mr. Freke Palmer, solicitor, appeared for the defence. The case for the prosecution was, that a Mrs. Astley, of North-bank, Regent's-park, on October 10th, sent a man named Knowlman to the defendant's house to purchase three bottles of Perrier-Jouët champagne. A barmaid served him, and charged him at the rate of 5s. 9d. a bottle. When the wine of one of the bottles was tasted it was disapproved of by Mrs. Astley, her servant, and others in the kitchen. The cork, fastening, and the label, were accordingly examined, and, coming to the conclusion that the wine was not Perrier-Jouët, Knowlman took the bottles to Mr. Adolphe Boursot, the London agent of the Perrier-Jouët Company, who instituted these proceedings. Mr. George Valentine (Messrs. Daun and Valentine, distillers) said the defendant was a customer of his firm. Between the June of last year and the July of this year the defendant had purchased sixty-six dozen of Perrier-Jouët champagne, at 65s. 6d. and 64s. a dozen. In cross-examination the witness said the defendant had bought of the firm to the extent of £100 a month. The labels on the bottles now produced were undoubtedly a fraud. Mr. Valentine Green, London manager to Messrs. Green and Co., proprietors of the Chateau de Condé champagne, tasted the wine of one of the bottles in question—which was opened in court—and emphatically pronounced that it was Chateau de Condé wine, probably of the 1880-81 growth. This wine was sold at 42s. a dozen (wholesale), and was generally retailed at 54s. In cross-examination, the witness said there could be no doubt that grocers were underselling publicans in the prices of their wines and spirits. John Greenwood Knowlman, of 9, Lodge-road, St. John's-wood, said he was sent by Mrs. Astley on October 10th to the defendant's house to purchase the three bottles of Perrier-Jouët champagne. Cross-examined: The persons who tasted the champagne were himself, his wife, Miss Moody, hairdresser, Kate, the servant, and several others. Counsel: Is this house where Mrs. Astley lives a house of ill-fame? Witness: I suppose you would call it so—lodging-house, or whatever they call it. Counsel: Did you get this champagne for some visitors in the house? Witness: I got it for Mrs. Astley. Counsel: Did she want it for visitors in the house? Witness: I don't know that. Counsel: Were there visitors in the house at the time? Witness: I believe so. Counsel: Are you in the habit of getting champagne to sell to visitors in the house? Witness: I am not. I have fetched wine for myself and my wife. Counsel: Were you living at 9, Lodge-road, five years ago? Witness: About that time. Not living there altogether. The woman I call my wife was living there—Mrs. Marshall they call her. Counsel: Used you in that house to supply visitors with champagne? Witness: I cannot tell what my wife did. I don't know what was done.—Counsel: Will you swear you don't know that champagne was being supplied? Witness: I won't swear. Counsel: Had you in that house some Perrier-Jouët labels? Witness: No; I will swear that emphatically. Counsel: Was it the business of the woman O'Mara to take champagne up to the visitors? Witness: I cannot say. I was not there. Counsel: You don't know that Perrier-Jouët labels were stuck on the bottles before they were taken upstairs? Witness: I say positively that it was never done. Counsel: Have you yourself been seen to put the labels on? Witness: No, never. I emphatically deny it. Counsel: I put it to you that you have yourself given instructions to this woman to put labels on the bottles before she took them upstairs and opened them? Witness: I have never. It is a piece of perjury to say such a thing. Counsel: Are you known by any other name? Witness: I am not. They call me "Marshall," but I have no letters addressed in that way. Counsel: Are you known by the name of "Gentleman John"? (Laughter). Witness: Yes, it may be a "flash" name they call me. Witness, continuing, said there was a man who went about with him with a photograph who was known as "Slippery." Counsel: Was it one of the visitors in the house at North-bank who complained that this champagne was wrong? Witness: In the kitchen do you mean? Counsel: No. Witness: No, not that I know of. Counsel: Did you go back and tell Mr. Webster that something was wrong with the champagne? Witness: No, never. Robert Solomon, a cabman, of Sidney-road, Goswell-road, said he drove the previous witness from North-bank to the Red House on the night of the 10th ult. They both went in, and witness saw Knowlman served with three bottles.

which they together took away with them and rode back to North bank. Kate Connell, housemaid to Mrs. Astley, having given evidence, Ethel Astley, landlady, of 14, North-bank, deposed to sending Knowlman for the champagne on the night of the 10th. She broke the wire of one bottle and was ready to cut the string, but found it had none. She tried to draw the cork but failed, and she got Knowlman to do it. The cork was afterwards handed over to the police. Cross-examined, the witness denied knowing that the man Knowlman had lived for thirteen years on the results of his wife's immoral life. She (witness) did not accept Knowlman's description of her house: she called it a lodging-house. Detective-sergeant Holder, D division, said he, the solicitor, Mr. Boursot, and Inspector Towner, served the summons on the defendant, and also read the search-warrant to him. Mr. Webster said, "You take me by surprise; you are quite welcome to search where you like. I'll give you every assistance. Where would you like to start first? I might have been told of this before." The house was searched, and Perrier-Jouët champagne and other champagne marked "D. and V." were found in the house, all of genuine quality. When asked where his empty bottles were, the defendant said there were some under a heap of coal and coke. Some empty bottles were found in the skittle-alley, and the defendant's explanation of their having been washed was that he intended bottling some cyder. The defendant gave every facility for the search. The case was adjourned.

PROSECUTING THE FARMER.

At Lambeth Police-court, on November 26th, Thomas Cooper, a dairy farmer, of Vale Farm, Winchfield, appeared to answer a summons, taken out by Inspector Groom on behalf of the Camberwell Vestry, for causing to be delivered to the consignee, in pursuance of a contract for its sale by such consignee, milk containing 13 per cent. of added water. Mr. G. W. Marsden, solicitor to the Vestry, appeared in support of the summons; and Mr. Ricketts, solicitor, defended. Mr. Marsden stated that in October last a man named Mellor was fined at this Court for selling adulterated milk. In consequence of information given by him, Inspector Groom met the churns consigned by the defendant at Vauxhall Station and tested the milk. For the period of a week every one of the samples taken contained from 13 to 18 per cent. of water. On October 19th, Inspector Groom went down to Winchfield and followed a churn of milk from the defendant's farm to the railway station, and travelled in the brake with it to London. When the churn arrived within the jurisdiction of the Vestry a sample of the milk was taken, and upon analysis it was found to contain 13 per cent. of added water. Inspector Groom and a number of other witnesses were called in support of the summons. For the defence Mr. Ricketts said his client had brought to the Court every one he could bring to show that the milk was not tampered with. Recent experiments that had been made went to show that the exceptional season had altogether upset the calculation of the Analysts, and that the composition of the milk had been affected by the poverty of the food. Mr. Hopkins reserved his decision.

THE MAYBRICK CASE AND ARSENIC IN GLYCERINE.

Mr. Bird has, in a communication to the Press, offered the following explanation:—He says that though the glycerine offered to his firm was not pure enough, and he therefore rejected it, the percentage of arsenic was so small that there was no likelihood of anyone ever taking sufficient glycerine to contain a fatal dose. Moreover, Mr. Maybrick was said to be a confirmed arsenic eater, and could, it was contended, withstand what would kill a person unused to the poison. Then again, Mr. Bird was aware of the fact that the glycerine and borax were merely applied to the deceased's lips, and so he came to the conclusion that this had nothing to do with the death. Mr. Bird says he did not revive the subject with a view to throwing any light upon the death of Mr. Maybrick: nothing was further from his mind. (This we can personally corroborate, as our readers will see on referring to the Meat Extract analysis, which, had it not been for the fact that Valentine's Meat Juice played so prominent a part in the Maybrick case, would not have led us to make any reference to the case.) Mr. Bird said it merely occurred to him that the arsenic might have been in the bottle innocently enough, and he casually spoke of it a few weeks ago.

Until a few years ago glycerine was not used medicinally, but was employed in a variety of ways all over the world. For instance, it was used for preventing mustard from drying, for keeping snuff damp, for preserving fruit, for sweetening liqueurs, wines, beers, and malt extract, for lubricating machinery and watches, for printer's ink, for paper-making, and for mixing with water for gas meters. About three or four years ago it was the fashion for doctors to prescribe glycerine instead of cod-liver oil, and

then there became a demand for it. The German manufacturer was probably unaware that it was intended to be swallowed, and therefore considered it good enough to be put on the market. In reply to the question of how the arsenic got into the glycerine, Mr. Bird explained that it arose from the fact that a large percentage of ordinary glycerine was obtained in the preparation of lead plaster. It was also a large product of the soap trade, and in distillation arsenical impurity occurred. The purest glycerine was obtained from fats. In conclusion, Mr. Bird stated that he had no intention of doing anything to bring the subject under the notice of the Home Office, because he believed that the glycerine and borax applied to Mr. Maybrick's lips had nothing whatever to do with his death. It was singular, however, that at the trial the expert Analysts did not mention that the arsenic might probably have been unintentionally bought with the glycerine. Had it been upon this evidence that the Court was influenced he would have detailed his own experience, but it was upon other testimony that the Court convicted Mrs. Maybrick of the murder.

UTILISING ANOTHER WASTE PRODUCT.

The Burton Brewers are under obligation to the hot summer, not only for causing an increased consumption of beer, but for providing outlet for spent hops. In the scarcity of litter for stock and the an high price obtainable for straw, the farmers in the neighbourhood of Leicester are using them largely for litter:—

Cheap Barley	Dear Grains
Hot Weather	Much Beer
Bad Harvest	Refuse Bought

While the farmer starves, the brewer thrives from the same causes, and don't they know it! As the brewer buys his foreign barley for less than the Englishman can grow it, he marks his appreciation of the purchase by giving the farmer another push downwards in order to get upward further himself, by charging enormously for his refuse grains, and rubbish.—*Cowkeeper and Dairyman.*

CITY OF LEEDS.

The report of Mr. Thomas Fairley, F.R.S.E., F.C.S., Public Analyst for Leeds for the quarter ending September 30th, 1893, says:—

"The following samples have been received:—Milk, 87; skim milk, 1; butter, 3; cheese, 6; mustard, 1; vinegar 10; seidlitz powder, 1; total, 59. Six of the samples of milk were adulterated with 22, 17, 16, 12, 10, and 9 per cent. of water respectively, as compared with the lowest quality of genuine milk. One sample had been deprived of 10 per cent. of its fat, and ten were reported to be of low quality. The fat of one sample of cheese contained 70 per cent. of fat other than milk fat. The sample of mustard was adulterated with at least 60 per cent. of foreign starchy matter. Two of the samples of vinegar were adulterated, containing not more than 10 per cent. of real malt vinegar. The analysis showed them to consist of dilute acetic acid coloured with burnt sugar. The other samples were genuine."

GIN.

At Mansfield Police Court, on Nov. 30th, George Fearn, landlord of the Railway Inn (for whom Mr. D. Fiddler appeared), was brought up by Mr. Crabtree for having sold on Saturday, the 21st of Oct., gin, which on being submitted to the Public Analyst, was found to contain 12 parts of water. Complainant did not wish to press the matter, and the case was dismissed. W. H. Carver, landlord of the Durham Ox, was then charged for having sold adulterated whisky on the 21st of Oct. Mr. Crabtree stated that he purchased a quartern of whisky, which was supplied by defendant's daughter. On being analysed the spirit was found to contain six per cent. of added water. Fined 10s. 6d. and costs.

POWELL'S BALSAM OF ANISEED—FOR COUGHS.

Powell's Balsam of Aniseed—Coughs and Asthma.
 Powell's Balsam of Aniseed—Coughs and Bronchitis.
 Powell's Balsam of Aniseed—Coughs and Hoarseness.
 Powell's Balsam of Aniseed—Coughs and Lung Troubles.
 Powell's Balsam of Aniseed—Coughs—Safe and Reliable.
 Powell's Balsam of Aniseed—Coughs—Established 1824.
 Powell's Balsam of Aniseed—Coughs—Refuse Imitations.
 Powell's Balsam of Aniseed—Coughs—Sold by Chemists.
 Powell's Balsam of Aniseed—Coughs, Night Cough, Influenza.
 Powell's Balsam of Aniseed—Coughs Relieved Instantly.
 Powell's Balsam of Aniseed—Coughs—The Oldest Remedy.
 Powell's Balsam of Aniseed—Coughs—Trade Mark.
 Powell's Balsam of Aniseed—Lion, Net, and Mouse.
 Powell's Balsam of Aniseed—1s. 1½d., 2s. 8d.

Newsagents may obtain

"**FOOD AND SANITATION**"
 from Messrs. W. H. Smith & Sons; Messrs. Simp-
 kin, Marshall, Hamilton, Kent & Co.

Attractive Contents Bills will be sent on receipt of Post-
 card, addressed—

"Food and Sanitation," 183, Strand.

GUARANTEED ABSOLUTELY PURE.

Warranted to stand any Analytical test A
 natural product ensuring perfect
 digestion not possible in the
 various manufactured
 Acetic compounds

Can be
supplied in bulk.

SICILIAN WINE VINEGAR.

Write for Samples
and Price to Sole Proprietors:—
72, Mark Lane, London, E.C.

READ & DIGHT.

THE PROFITS OF A DAIRY.

A correspondent favours us with the following statement of the income and expenditure of a dairy which is worked practically on the principles laid down in connection with the asylum under the charge of the Argyll and Bute Lunacy Board. The dairy consists of eighteen cows, sixteen of which are giving milk, while the other two are in calf, and as soon as they have calved, another pair are either sold or killed for the use of the establishment. The milk is charged at the rate of 8d. per gallon. The statement is as follows:—

INCOME.		
Butcher meat sold	£326	1 3
Milk	643	11 4
Cattle sold	75	14 1
Value of eighteen cows at 15th May, 1893	£198	0 0
Value of eighteen cows at 15th May, 1892	182	17 0
100 tons manure supplied garden at 3s. 6d. ..	15	3 0
	17	10 0
	£1077	19 8
EXPENDITURE.		
Proportion of interest, say	£10	0 0
Cattle	276	5 6
Fodder, grain, and feeding stuffs	£529	6 0
Less keep of four horses at 18s. per week	187	4 0
	342	2 0
Wages—		
Farm manager	50	0 0
Dairymaid	18	0 0
Do. board, say	25	0 0
	93	0 0
Proportion of fuel, light, byre furnishings, say	30	0 0
Rent of land, say 20 acres, at £1 10s.	30	0 0
	781	7 6

Profit £296 12 2

The farm manager and the dairymaid are assisted by several of the patients in connection with the establishment, and a small deduction should be made on this account for milking.

"FOOD & SANITATION" has over 50,000 Readers: Medical Practitioners, Sanitary Inspectors, Food and Drugs Acts Inspectors, Wholesale and Retail Grocers, Weights and Measures Inspectors, Town Clerks, Solicitors concerned with the Food and Drugs and Public Health Acts, Surveyors, Medical Officers of Health, and the General Public.

NOTICE TO SUBSCRIBERS.

Index to Volumes I. and II. is now ready, price 1s. Volumes I. and II., bound in cloth, gold lettered, with index complete, 20s. each, carriage paid. Postal Orders to be made payable to the Publisher, FOOD AND SANITATION, 183, Strand.

CORRESPONDENCE.

WHAT IS VINEGAR?

To the EDITOR OF FOOD AND SANITATION.

SIR,—The letter signed "Expert" on vinegar in your last edition is evidently the opinion of one who has not given the question of malt vinegar the careful attention that it should receive from one so signing himself.

Analysts have lately created a call for malt vinegar which did not exist before. I have all along understood that they did so because vinegar so brewed contained certain aromatic properties peculiar to malted (sprouted) barley; and there is no doubt that flavour is the sole cause of its individuality, or superiority as some maintain.

"Expert" knows that rice converted into glucose by sulphuric acid is an entirely different product to the wort of a malted barley, and does not contain the same aromatic properties which alone make a malt vinegar differ from other commercial vinegars. His argument that "modern advanced improvements" have taught us the way to avoiding the old and expensive process of malting will lead him into many difficulties. Chemists with modern advanced thought have taught the brewer to use glucose and sugar without taking themselves the trouble to convert the starch of the vegetable product into saccharine matter. We conclude, therefore, that "Expert" is prepared to class all such vinegars as malt.

I presume that he and other Analysts are feeling inclined to admit so many vinegars as malt is owing to their inability to distinguish between any of them. Before appearing further in police courts, and causing an immense amount of annoyance to a large trade, I suggest that they stick to their laboratories a little longer, and experiment with the hope of finding tests of an unfailing description to apply to the examination of all classes of vinegar samples put before them.—Yours very truly,

Dec. 6th, 1893.

A BREWER.

SIEGEL'S CURATIVE SYRUP.

To the EDITOR OF FOOD AND SANITATION.

SIR,—Amongst the analyses published in FOOD AND SANITATION has there appeared one of Siegel's Curative Syrup? If so, I should like to obtain number.—Yours, etc.,

G. D. KERR, M.B.C.S., L.R.C.P.

[No analysis of this nostrum has yet been published in FOOD AND SANITATION. It was, however, analysed a few years ago, and found to be a mixture of capsicum, aloes, liquorice, treacle, and borax, aloes being the principal ingredient.—ED.]

To the EDITOR OF FOOD AND SANITATION.

THE MAYBRICK CASE.

SIR,—It is not to be wondered at that the demand for copies of the remarkable article in your issue of 22nd April, should continue, and that this demand should have made it necessary for you to reproduce that article in your issue of 18th November, because it made a profound impression on the public, and also on medical men to whom your analysis of such foods as Valentine's Meat Juice, Brand's Essence, &c., which they had been in the habit of prescribing as nourishment for invalids, came as a revelation—and it is within my personal knowledge that the late Sir Andrew Clark was so much impressed by it, that he pressed it upon the attention not only of medical students who attended his lectures, but upon the medical profession generally.

You point out, by way of illustration, that it was Valentine's Meat Juice which James Maybrick's doctors prescribed for him as food during his illness, and suggest that that being so, as Valentine's Meat Juice practically speaking contains no nourishment whatever, the cause of the man's death may just as likely have been starvation as anything else. The cause of James Maybrick's death is an open question until this day. During his illness the doctors (Humphrey and Carter) who attended him, diagnosed and treated his complaint as dyspepsia. At the post mortem, they came to the conclusion, to quote Dr. Humphrey's evidence, that "the actual cause of death was exhaustion," and they attributed that "exhaustion" to *gastro enteritis* having been set up by some irritant poison—but whether that irritant poison was unwholesome food or drink or some active vegetable or mineral poison they could not say. On an analysis of the body, however, the Analysts employed (Davies and Stevenson) found some very minute traces of arsenic, amounting in the aggregate to the tiny quantity of one-tenth of a grain (insufficient in itself to cause the death of even a mouse), but these minute traces having been found, some of the doctors at the trial said that it was arsenic which had set up the *gastro enteritis*, which had resulted in the man's death by "exhaustion," and, notwithstanding that the Judge (Mr. Justice Stephen) pointed out that "there was so very little of it," and, notwithstanding the positive opinion of such toxicological and medical experts as Dr. Tidy, Dr. Maconmara, Professor Paul, and Dr. Barron, that both the symptoms during life, and the appearances after death, "pointed away from, instead of to, arsenic as the cause of death," and notwithstanding again that the judge emphatically laid down to the jury as law, "It is a necessary step—it is essential to this charge that the man died of poison, and the poison suggested is arsenic—this question you have to consider, and it must be the foundation of a judgment unfavourable to the prisoner that he died of arsenic," and then went on to say "The doctors are divided in opinion, and, of course, I cannot answer the question whether there was arsenical poisoning or not." Notwithstanding all this, the Liverpool Common Jury considered that they could, and by their verdict of guilty against Mrs. Maybrick found, that the cause of the man's death was arsenic, but the Home Secretary (Mr. Matthews) on reconsideration of the evidence, with the aid of the "best medical advisers that could be obtained," advised the Queen that the evidence left "a reasonable doubt whether his death was, in fact, caused by the administration of arsenic," and from that day to this the cause of James Maybrick's death is an open question, and the only thing ascertained with medical certainty about it is (to again quote Dr. Humphrey's evidence) that "the actual cause of death was exhaustion." The suggestion, therefore, which you make (on ascertaining by your analysis of the sort of food which was prescribed for him during his illness that it practically contained no nourishing properties whatever), that "James Maybrick's death was as likely the result of starvation as poisoning," gives force to the widespread public feeling that there ought to be a public reinvestigation of this case, and that the at present open question as to the cause of this man's death should to be set at rest.

If there is the slightest ground for the suggestion you make, that this man's doctors, having prescribed Valentine's meat juice for him as nourishment, when, in fact, it contains no nourishment, the cause of his death may have been the "result of starvation," the question assumes far larger proportions than the question of this particular man's death. It reaches to the whole domestic life of England in these days, because we are all dependent upon our doctors whenever we or any of our friends are laid on the bed of illness, as to the sort of nourishment which should be taken in times of sickness, and it has been usual for doctors to order such foods as Valentine's meat juice. In James Maybrick's case, Mr. Justice Stephen pointed out that, "from the beginning of his illness to the end, we know everything that was administered. Everything that was given him was given under the most careful and watchful régime of medical men and nurses," and, therefore, the Maybrick case affords an unusually

good opportunity of discovering, at a reinvestigation of it, what the constituent parts of the foods and medicines given to this sick man were, and whether, as "the actual cause of death was exhaustion," that exhaustion is, as you suggest, capable of being accounted for by starvation, in consequence of such innutritious foods as Valentine's Meat Juice having been given him by way of his nourishment, such a question as you have raised, if realized, must cause an anxious feeling in almost every home in England. We trust to our doctors—we suppose when they order our sick people to take this or that preparation as nourishment, that they know what its constituents are. At the end of the nineteenth century we no longer think of physicians as they did in years gone by as people who "put drugs of which they know little into a body of which they know less." We think medical science has reached such a stage that our doctors know all about everything they put into our bodies, and all about our bodies also, and when we call in a doctor, even though he be stranger to the patient, and ignorant of all his life and habits, and simply because he is a doctor, we rely implicitly on whatever he says as to what nourishment and what kind of nourishment the patient should have. At the sick man's bedside in all matters of food and medicine he is an autocrat, and we look upon him as a sort of Pope, infallible in his judgment as to what is good for the sick man. We suppose that when he, for example, orders Valentine's Meat Juice, he knows all the constituents of it. But what a startling revelation you have made! By your analysis of it you have shown that it contains, practically speaking, no nourishment at all, and that our doctors when they prescribed it as nourishment were as ignorant about what it is composed of as the first man we may meet in the street, whose only knowledge of it consists of the fact that it is a widely used food for invalids!—Yours faithfully,

ALEXANDER W. MACDOUGALL.

Oakhurst, Westcombe Park, S.E.

THE MAYBRICK CASE.

To the EDITOR OF FOOD AND SANITATION.

SIR,—The case of Mrs. Maybrick seems likely to throw a good deal of light on questions within the general scope of your excellent paper. That glycerine often contains arsenic has, I think, been chiefly made known to the public through your agency. May I ask whether the same remark is not applicable to bismuth? Mr. Maybrick was taking large quantities of this drug shortly before his death, and the parts of the body which contained arsenic were found to contain larger quantities of bismuth. The proportion in the intestines, according to Dr. Stevenson, was 100 to 1.

Another subject which may not be unsuited to your columns is the use of arsenic as a stimulant, and also as a cosmetic, or as a remedy for eruptions. Some of your correspondents may be able to give you examples of its use for these purposes. It may be noticed that though no flies were about in the month of April, 1889, Mrs. Maybrick was not the first person to whom either Mr. Wokes or Mr. Hanson had sold fly-papers during that year, and Mr. Hanson had them displayed conspicuously on his counter. It was also remarked that the arsenic in a package found in this case was mixed with charcoal instead of soot or indigo, contrary to the terms of the statute. Can any of your readers throw light on this circumstance? Was the arsenic purchased abroad, or was a mixture of the kind on sale in England at the time?

Can any of your readers state whether a mixture of arsenic and charcoal can be procured in this country, or whether it must have

been purchased abroad? By statute, soot or indigo ought to be mixed with the arsenic instead of charcoal, but some of your readers may know of instances in which this provision was violated or evaded. It is, however, remarkable that the police failed to procure any evidence as to the purchase of this mixture. Perhaps their efforts were directed too exclusively to purchases by Mrs. Maybrick, and that if they had extended their inquiries to other persons who might have brought it there, they would have proved more successful. A facsimile of the handwriting on this packet ought to have been published at the time, and though rather late, it ought to be done even now.

Truly yours,

OBSERVER.

UNFERMENTED WINES.

To the EDITOR OF FOOD AND SANITATION.

DEAR SIR,—Can you give your readers some information with reference to the composition of so-called unfermented wines. I see them advertised as the pure juice of the grape. If they are not syrups and not wines at all, I am at a loss to understand how they are rendered stable. An analysis would no doubt be a revelation.

Faithfully yours,

J. FOX MORRISH.

4, Dingle-hill, Liverpool.

[We shall publish some results of analyses of these wines in a few weeks.—Ed.]

MEAT EXTRACT REVELATIONS.

To the EDITOR OF FOOD AND SANITATION.

DEAR SIR,—As one who takes a great interest in the subjects treated of in FOOD AND SANITATION, allow me to express a hope that you will be successful in your endeavour to suppress the humbug and quackery that is so common at present. With reference to your papers on Meat Extract Revelations, I may state that analyses made by myself bear out the general truths in your issue of November 18th. The only preparations worthy of the name of food that I have found among the meat extracts I have examined are Bovinine, Liqueur Carnis, and Bovril. I have not adopted the general methods of analysis in use at present, but have estimated the proteids by fractional heat coagulation to separate these coagulated by heat, estimating the albuminoids and peptones separately, in the filtrate from the heat coagula. I cannot understand medical men giving testimonials for the many worthless preparations now on the market, especially when they are ignorant of the actual composition of the so-called foods. I find that Valentine's Meat Juice is extensively ordered in this district by medical practitioners.—Yours truly,

C. E. G. SYMONS, M.B., C.M., D.P.H.

The Hollies, Merthyr Tydvil.

YEAST !! YEAST !!

JANSEN & COMPY.,

WESTMOLENSTRAAT, SCHIEDAM (HOLLAND).

Gold Medal, Amsterdam, 1886.

A GOOD RELIABLE PURE YEAST IS

JANSEN & CO.'S PARROT BRAND.

TRY IT !!!

MAY BE ORDERED DIRECT FROM OUR MANUFACTORY.
FRESH SHIPMENTS DAILY.

J. TRAVERS & SONS, Ltd.,

119, CANNON STREET, LONDON, E.C.,

WHOLESALE GROCERS, SPICE GRINDERS, &c.

SPECIALITIES IN PACKED GOODS.

"Ship" Brand First Quality Canned Fruits, Meat, Fish, &c.
"Penguin" Brand Salmon.
"Fountain" Brand Salmon.
"Opussum" Brand Tomatoes.

Tobacco Pepper. Sauce.
Ground Spices. Curry Powder.
Flour. Maize. Meal. Hominy.
Oatmeal.
E Lead.

SOLE AGENTS FOR THURBER'S AND GODILLOT'S CANNED AND OTHER GOODS.



Mild Cured. Choicest Flavour.

COOKED OX TONGUES, in Tins of $1\frac{1}{2}$, 2, $2\frac{1}{4}$, $2\frac{1}{2}$, 3, & $3\frac{1}{2}$ lbs.

PACKED BY

FAIRBANK CANNING COMPANY,
CHICAGO.Invaluable for Race, Pic Nic, Yachting
and Boating Parties.

TO BE OBTAINED WHOLESALE OF THE IMPORTERS,
MORRIS BEEF COMPANY, LIMITED,
MONUMENT YARD CHAMBERS, LONDON, E.C.

MALT VINEGARS.

WE guarantee all the Vinegars we are sending out to be brewed from MALT and BARLEY only—without the addition of RICE, MOLASSES or SUGAR—and that no description of ACID is used in the production of our Vinegars.

Brewery, Birmingham.

FARDON'S VINEGAR Co., Limited.

EDWARDS' DESICCATED SOUP.

IN FOUR VARIETIES.

BROWN—Beef and carefully selected garden Vegetables.

GRAVINA—EDWARDS' Gravy Powder

WHITE (VEGETABLE)—A purely Vegetable Preparation.

TOMATO—Containing all the valuable, agreeable, and health-giving properties of the fresh tomato, perfect and unimpaired.

Sold by all Grocers, &c. Cookery Book, post free. SOLE MANUFACTURERS—

FREDK. KING & CO., Ltd., 3-6, CAMOMILE STREET, LONDON, E.C.

BANCROFT'S LARD.

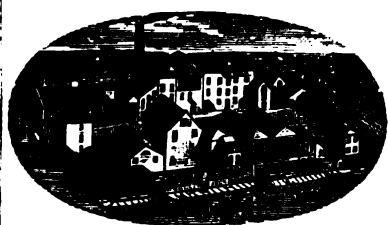
BOAR'S HEAD BRAND.

ABSOLUTELY PURE.

We guarantee our Lard to be perfectly free from water or any other adulteration. We only make ONE quality, viz. :—

ABSOLUTELY PURE LARD.

BANCROFT & CO., Ltd., Lard Refiners, LIVERPOOL



SLEE, SLEE & Co.,

Makers of

Pure Malt Vinegar.

LONDON.

ESTABLISHED 1812.

TRY H. C. JANSEN'S
DOUBLE SWAN YEAST.

SCHIEDAM, HOLLAND.

DIPLOMA OF HONOUR (HIGHEST AWARD)
INTERNATIONAL BAKERY EXHIBITION, AMSTERDAM, 1886.

MEDAL OF HONOUR } HIGHEST AWARD EVER GIVEN
DIPLOMA OF HONOUR } FOR YEAST.
INTERNATIONAL BAKERY EXHIBITION, GHENT, BELGIUM, 1893.

It is the strongest and most reliable Yeast in the market, and GUARANTEED FREE FROM any mixture whatever.

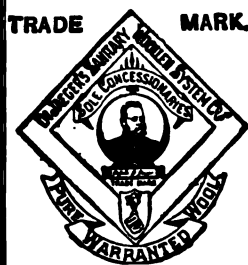
BALLARD'S MALT VINEGAR.

BREWERY—COLWALL, MALVERN.

GUARANTEED ABSOLUTELY PURE.

TESTED FOR PURITY NON-SHRINKING AND STRENGTH

Protection from Chill in all Climates.



JAEGER PURE WOOL CLOTHING.

*The Best is the Cheapest!
Fixed, moderate prices for first quality.*

The "JAEGER" Goods are tested for Purity in the Company's own Laboratory, and Guaranteed by this Trade Mark, without which none are genuine.

Dr. Jaeger's "Health Culture," and Jaeger Company's Price List, sent free on application.

WEST-END JAEGER DEPOTS:

8 & 4, PRINCES STREET, CAVENDISH SQUARE (near Regent Circus).
126, REGENT STREET (near the Quadrant).
80, SLOANE STREET (adjoining McPherson's Gymnasium).
456, STRAND (near Trafalgar Square).

CITY JAEGER DEPOTS:

85 and 86, CHEAPSIDE (near King Street).
158, FENCHURCH STREET (near Lime Street).
42 and 43, FORE STREET (near Moorgate Street Station).

GRIMBLE'S PURE VINEGAR

Guaranteed BREWED and free from ANY ADDED ACIDS.

GRIMBLE & Co., Limited, Cumberland Market, London, N.W.

PURE
YEAST



PURE
YEAST

Use 4 ozs. to 280 lbs. Flour, second turn in winter.

For doughing direct, and other methods of working, address—

W. HEPWORTH, Harwich, Essex.

Most powerful Yeast known.

SUPERIOR FLAVOUR. LONGEST KEEPING.

Highest Awards, Healtheries, London, 1884.

LONDON, 1893 (this Year).

LARGEST YEAST WORKS IN THE WORLD.

Chafed Skin, Piles, Scalds, Chilblains, Chapped Hands, Neuralgia, and Rheumatic Pains, Sore Eyes, Ear-ache, Cuts, Sunburn, Insect Bites for Stings, Throat Colds, and Skin Ailments quickly relieved by use of

CALVERT'S CARBOLIC OINTMENT,

Large Pots, 13d. each, with full Instructions.

Court Circular says: "We cannot too highly recommend Calvert's Ointment. It is the best general Ointment with which we are familiar, and ought to be a stock remedy in every household."

Private report from Limassol Cyprus: "I have never found anything to come up to it for neuralgia and 'Rheumatic Pains.'"

Samples sent Free by Post on receipt of value.

F. C. CALVERT & CO., MANCHESTER.

Awarded 60 Gold and Silver Medals and Diplomas.

TRUE RECIPROCITY!

OR HOW TO MAKE HAPPY ENGLISH HOMES.

If all the Smokers of American Manufactured Cigarettes were to smoke our

"SILVER VEIL,"

or other English Brand, employment would be afforded to Thousands of respectable and deserving English Girls, besides a large amount of additional adult labor.

Why support the product of a country which brags of its McKinley Tariff Bill, introduced to devastate English manufactures.

Why not, rather, smoke Cigarettes made out of precisely the same Tobacco, but rolled in English Factories by English Girls, and pay back in its own coin Grab-all Yankeeism.

OGDENS' FACTORIES, LIVERPOOL.

FOOD & SANITATION,

THE ANTI-ADULTERATION JOURNAL.

A Journal for Manufacturers, Merchants, Wholesale and Retail Traders, Grocers and Provision Dealers, Dairy Farmers, English and Irish Produce Merchants and Bacon Curers, Pure Beer Brewers, Distillers, Fruit Growers, and Agriculturists.

PUBLISHED WEEKLY

BY
M. HENRY, at 183, STRAND, LONDON, W.C.

SUBSCRIPTION: PER ANNUM, POST FREE, 6s. 6d.

Food and Sanitation.

SATURDAY, DECEMBER 16, 1893.

PUBLIC ANALYSTS AND TRADERS.

Vinegar makers, in common with lard refiners, dairymen, produce merchants, and last, but not least important, the retailer, who suffers prosecutions for adulteration, in which he has often no hand whatever, would serve their own interests well were they to seriously consider what they suffer by the absence of a really competent court of appeal in adulteration cases. At present the Somerset House chemists occupy the position of the court of reference. How unfitted they are for those duties our columns have proved by hundreds of instances. Yet it is upon their *ipse dixit*, or upon that of a Public Analyst, who may be even as incompetent in food analysis as the Somerset House court of reference, that the good name, and it may be the ruin, of merchants, manufacturers, farmers, produce dealers, and retailers everywhere throughout the kingdom depends. The vast importance to all engaged in the sale of food stuffs of a capable court of appeal in adulteration prosecutions has hitherto been too little recognised by those affected by the sale of Food and Drugs Acts, and it is not to be wondered at that the existing imperfect, and in many cases incompetent, system of sampling and analysing leads to unnecessary and vexatious prosecutions. It must not be imagined that because there are some able Public Analysts acting under the Food and Drugs Acts all Public Analysts are capable and fitted for the discharge of the very delicate duties imposed by the Acts. There are Analysts and Analysts, and some, occupying important positions, are well known to be incompetent, and their existence as Public Analysts leads to grave injury being done to manufacturers and retailers who are prosecuted for adulteration where none exists. There are, again, Analysts who are known to be engaged in the sale of food and drugs contrary to the Acts, and who connive at adulteration

practiced by firms in whose businesses they have an interest. This is not as it ought to be. It has been often alleged against us that we are always upon the side of the Analysts. They have been slipshod readers of our journal, who have believed such to be the case. We advocate the enforcement of the Food and Drugs' Acts, not in the interests of Public Analysts, or of any class or profession, but of the vendors of unadulterated articles, and of the consuming public. We have not only seen instances where Analysts have been egregiously wrong, but we have written forcibly on them. The conviction has, however, every day more and more forced itself upon us that the existing system is radically wrong, and that manufacturers can have no security that they will receive fair play and be safe from vexatious prosecutions that may ruin their businesses until the method of appointing Public Analysts, and the court of reference at Somerset House is revolutionised. The existing system is dangerous to the trade of every person concerned with the manufacture of food stuffs, and to every vendor, and such being the case, it deserves more attention from these persons than has hitherto been devoted to it. As we write, we have a case before us in which the Public Analyst was undoubtedly in error in a certificate that caused the prosecution of a firm of the highest reputation in the wholesale and retail trades, and brought under suspicion the goods of a manufacturer of also unblemished repute. The Public Analyst's error caused the firm to expend £100 in defending a prosecution which never ought to have been instituted. Such cases are not only flagrantly unjust to the persons prosecuted, but they bring the administration of the Acts into disrepute. It is pleaded as an excuse for the fact that some persons hold positions as Public Analysts who are well known to be incompetent, that at the passing of the Act so little was known of food analysis that the bulk of the appointments made were those of persons who had yet to learn their business. It would be untrue to deny that great advances have been made within the last twenty years, but those advances has not been made by every one appointed as a Public Analyst; and it would also be just as untrue to deny that there are persons holding the positions as Public Analysts in important towns who even to-day know practically little of food analysis, and whose existence in such offices is a standing danger to all traders affected by the Food and Drugs and Margarine Acts. It is not to the interest of the body of the public that the present imperfect and slipshod system should endure, and the trading community ought to be eager for such reforms as would raise analysis under the Food and Drugs' Acts from its present chaotic condition. To take, as an instance, the question so repeatedly asked in our columns, "What is malt vinegar?" One Public Analyst asserts it is one thing; another that it is something entirely different; whilst the Somerset House court of reference is in the befogged condition that it does not know what to say, but its chemists shelter themselves behind generic statements, such as "the artificial vinegars of commerce," "commercial malt vinegar," &c. The existence of such an incapable authority as a court of reference here places traders between the devil and the deep sea.

That Somerset House is no longer fitted to exercise the functions of a court of reference we have long held, and the class of certificates we allude to act as dangerous pitfalls for traders. Somerset House does not say what malt vinegar is, because it does not know. One Public Analyst entertains one belief, another a different belief, and the manufacturer along with the retailer stand in the position of being shot at: no one can clearly say why, or with what justice. This is a sorry position for a reputed *scientific* Government department to occupy. It ought to be competent to state clearly what is or is not adulteration, but by its own showing it does not possess the knowledge to determine the question. It is high time manufacturers, merchants, dairymen, and retailers, looked the facts squarely in the face, and that grocers' associations and like representative bodies demanded.

1st. That a competent court of reference for appeal cases should be established, consisting of Food Analysts of proved capacity.

2nd. That no appointment should be made to the position of Public Analyst, unless the person appointed has been thoroughly examined as to his capacity for such a post by the scientists composing the court of reference.

3rd. That persons unjustly prosecuted for adulteration, shall have their full costs refunded, and the court of reference have the power to suspend temporarily or permanently as may be deemed necessary, such Public Analysts from the exercise of their duties as are found, by inaccurate certificates, to have caused unjust prosecutions. At present, a totally unfounded charge of dishonesty may be made against any dealer in foods, and however careless or incompetent be the person on whose certificate it is made, he is in nowise punished for what is a very cruel wrong, reflecting in the worst manner upon the honour of the person unjustly prosecuted. A really capable court of reference, composed of food Analysts of known probity, and having a liberal allowance for scientific research, with the duties imposed upon it of fixing

standards, and acquainting itself with new forms of fraud, would not only save the country a vast amount of money, but be a real protection to the manufacturer or vendor of pure food stuffs. It would also bring public analysis out of its present state of chaos and gain it the confidence of traders. At present the study of processes for the better detection of fraud are left entirely to chance; and a working Analyst, who has to live by his profession, cannot spare the time or the money for experiments that would bring to himself a scant monetary return. If we take butter as a case in point, the detection of large percentages of adulteration gives the Analyst little trouble; it is the *small percentages of admixture of five or ten per cent. of foreign fats that baffles him*. Analytical science is not yet sufficiently advanced to enable him to declare with certainty to these small percentages, and the large butter factors know it. Yet what does even a ten per cent. admixture of foreign fat in butter mean? It means an advantage of some 5s. per cwt. on the part of the foreigner practising this adulteration, that English and Irish butter-makers must do likewise, that we have to face the forcing out of our markets of genuine home-made butter, or reducing the price to this fraud created standard—for every butter-maker on the Continent knows full well that he can mix up to ten per cent. with impunity. If all imported butters were so treated it would mean a fraud practiced upon the public last week of some £10,000, or at the rate of £520,000 per year. We showed a fortnight ago how Londoners were swindled of some £890,000 per year by milk adulteration. Contrast with these—only a minute portion of the losses agriculturists and the public suffer by adulteration—the cost of a State endowed department for analysis and scientific research. If such a department, consisting say of twenty capable scientists cost the country £40,000 per year, the public would benefit by the suppression of adulteration to the extent of some millions of pounds annually, traders would not be harassed, and unjustly prosecuted, standards of purity of foods would be adopted, and in place of our present condition of chaos, order would reign. It is a reform that should be pressed upon the Government, for it is in truth at the root of our national prosperity, and the facts we have given should furnish traders everywhere with food for thought.

HOLLANDS GIN.

The reason why this spirit has not advanced more rapidly into public favour has been in a great degree owing to the fact that really high-class Geneva has, until recently, not been obtainable. The spirit commonly sold as Hollands gin in England is of a kind which a Dutchman would regard as an interesting curiosity, but would decline to run the experiment of drinking. It is becoming increasingly difficult to secure a pure spirit. If we take, as an example, whisky, we find that the enormous increase in the sale of this spirit during the past few years has led to the flooding of the market with so many blends of malt grain and potato spirit, that the whisky drinker is bewildered. If he be not wise enough to strictly confine himself to what is guaranteed to be a genuine article, such as John Jameson's and Old Bushmill's in Irish whiskies, or Lennox's pure malt whisky in Scotch whiskies, he pays the penalty of his trustfulness by headache and nausea. But high-class whiskies afford the owner of a number of "tied houses," or the individual publican, far less profit than the "faked" ones, and it is usually only in the best hotels that genuine whisky is to be bought retailed, the ordinary public-house being the medium by which the blends of malt, grain and potato spirit are disposed of. Slowly, but yet perceptibly, there is a turning from whisky as there was from brandy, and for the same reason, viz., the difficulty of obtaining a genuine spirit. There has thus come about a gradually growing demand for Hollands gin, which many medical men now recommend to spirit drinkers in preference to suspicious whiskies. For this reason the makers of high-class Geneva are giving more attention to English requirements than they have hitherto done, and at last the real Geneva loved by the Dutchman is obtainable in this country. We have recently compared a dozen well-known Hollands gins of various makers, consisting of those mainly drunk in England, and of gins drunk exclusively in Holland hitherto unobtainable in this country. We find that those having the largest sale in England are not the product of one distillery, but blends of spirit purchased from a number of petty distillers of varying character and quality, and which are, as is the case with so many Scotch and Irish whiskies, "faked" for the English market. The growing demand in England for Hollands gin, however, has led the largest of the Dutch distillers—"the John Jameson of Holland"—Mr. H. C. Jansen to offer his "Goldfinch" brand of Hollands gin to the trade in the United Kingdom. What John Jameson is in Ireland, Mr. Jansen is in Holland—his own maltster, and unapproached as a distiller. The counoiseur in Schiedam drinking asks in Holland for the "Goldfinch," as the Irish whisky judge asks for his John Jameson. The "ten year old Goldfinch" Schiedam, in particular, is a spirit devoid of what to many is the obnoxious character of the commonly known Genevas, of admirable flavour, and the perfection of a pure spirit.

SOMERSET HOUSE AND MALT VINEGAR.

For months past vinegar manufacturers, retail grocers, and Public Analysts have been discussing the question, "What is Malt Vinegar?" We notice that in the case heard at Manchester, on December 6th, the Somerset House chemists say that "the sample corresponds with a commercial malt vinegar." Apparently, therefore, Somerset House knows what is "Malt Vinegar," and what is "Commercial Malt Vinegar." Such being the case, it is the duty of the department to make their knowledge public property, to the end that the present uncertainty as to what is, or is not malt vinegar, may no longer prevail. If they know what is malt vinegar, manufacturers may well ask why the Somerset House court of reference in matters of vinegar adulteration have for so long carefully kept the knowledge to themselves.

That it is high time there was a definite statement made as to what malt vinegar is, the following case shows:—

At Keighley Borough Court, on December 5th, the adjourned summons against Mr. James Groves, grocer and provision merchant, Low-street and East-parade, for selling adulterated vinegar was heard. Mr. Herbert Hankinson (from the West Riding Solicitor's Office, Wakefield) prosecuted on behalf of the West Riding County Council. Mr. W. A. Robinson appeared for the defendant. Mr. Hankinson: From the analysis made by the West Riding Public Analyst it appeared that the vinegar consisted of 50 parts of malt vinegar, the remaining 50 parts being dilute acetic acid, or vinegar from other sources than malt—probably sugar. Mr. Hankinson contended that in being supplied with vinegar consisting of only 50 parts of malt vinegar the Inspector was not supplied with "malt vinegar" within the meaning of the Act of Parliament. In reply to the Mayor, Mr. Hankinson said there was no definition in the Act of the term "malt vinegar." Mr. Robinson: No; that is where the difficulty comes in.

Mr. Arthur Randerson, the local Food and Drugs Inspector, was then called. He produced the Analyst's certificate, to which were added certain observations on the case by the Analyst. Mr. Robinson objected to any "observations" appearing upon the report. Mr. Hankinson referred to the Act, and held that the Analyst was entitled to state his observations. Mr. Robinson differed with the interpretation, but did not press his objection. Mr. Randerson, continuing, said that on the 16th November he was in company with his assistant, Mr. Joseph Smith, when Mr. Groves stopped him and said he was very sorry that this incident had arisen. He also agreed not to sell any more of the vinegar until he had written to the manufacturers about it. He saw Mr. Groves twice.

Mr. Alfred Henry Allen, the West Riding Public Analyst, confirmed his certificate. By the term "malt vinegar" he understood vinegar from malt and malted grain, such as was made by several well-known manufacturers. This was a more liberal interpretation of the term than that adopted by some analysts, who contended that malt vinegar was vinegar made wholly from malt. He did not see that they could regard vinegar made from sugar, or materials other than malt, as malt vinegar. For instance, if they asked for raspberry jam they would not like to be served with a jam made from apples and turnips. In the same way, malt beer was expected to be made from malt. It was not as if malt vinegar was not an article of commerce. Mr. Robinson: I think you admit that the foundation of this vinegar is malt? Mr. Allen: I should not say "foundation." I think about fifty parts. In reply to a further question, witness said he could easily distinguish malt vinegar from sugar vinegar. Mr. Allen said that fifty years ago a small quantity of sulphuric acid was added by the manufacturers as a preservative to the malt vinegar. Sugar vinegar was very good vinegar, and would keep better than the old-fashioned malt vinegar. He had recently given evidence in a case at Wakefield. That case was dismissed on the ground that there was no definition of what constituted malt vinegar. There was an important difference between the Wakefield case and the present one. There were several kinds of vinegar, among them being malt vinegar, cider vinegar, sugar vinegar, and wine vinegar. He did not dispute in the least that the vinegar in question was good vinegar. Alderman Brigg: I think there has not been a case of this kind decided by the Higher Courts. Mr. Hankinson: That is so.

Mr. Robinson spoke at length for the defence. He first set himself to clear Mr. Groves of the charge, which, he said, was a serious one for a tradesman in his position. He first produced the invoice for the vinegar. On that invoice was printed, "All our vinegar warranted unadulterated," and that statement, he submitted, amounted to a warranty. More than that, a label on the barrel certified the article to be "unadulterated vinegar." The question might arise whether the statement on the invoice constituted a legal warranty. Mr. Hankinson: I cannot admit that it does. Mr. Robinson quoted a case, *Laidlaw v. Wilson*, in which the offence was selling adulterated lard. The justices dismissed that case on the strength of the words, "Pure lard" on the invoice. Continuing, Mr. Robinson advanced further arguments in support of his claim to have the case dismissed. He contended that Mr. Groves sold the vinegar exactly in the state in which he bought it; that what was added was simply to make the vinegar a better commercial commodity, and not to make it more in weight or bulk, or with a view to represent it to be that which it was not; and that the article sold was absolutely what is known as malt vinegar.

Mr. Malcolmson, managing director of Messrs. Grimble and Co., Limited, Cumberland Market, London, said his firm supplied this vinegar as malt vinegar. It was such as the authorities at Somerset House had for several years—the present year included—passed as malt vinegar. It was a great source of satisfaction, he added, to vinegar brewers, to know that their samples were passed by the Government. They could make the vinegar from malt and malted grain considerably cheaper than under the present system, in which they employed sugar. They used sugar because it produced a better vinegar, and as a matter of fact malt vinegar made entirely from malt and malted grain would not keep more than a few weeks. Mr. Hankinson: Why don't you call it sugar vinegar? Witness: Because it is malt vinegar. I don't believe there is such a thing made in England as vinegar wholly from malt and raw grain.

Mr. Smith Tillotson, the manager of Mr. Groves's East-parade establishment, said he bought the vinegar as malt vinegar, and it was sold just it was received. The company's traveller showed him a written warranty.

This concluded the case. The Magistrates retired to consider the verdict. They returned after ten minutes' absence. The Mayor said the Bench had come to the conclusion that, in view of the fact that there was no legal definition of what constituted malt vinegar, and on account of the evidence that the authorities at Somerset House has passed this quality as malt vinegar, there was not sufficient evidence to justify a conviction. The case would therefore be dismissed.

What traders, manufacturers, and analysts require is definiteness upon this question, and as Somerset House is the court of reference in matters analytical, it is time it said what malt vinegar is.

ALLEGED ADULTERATION OF VINEGAR.

At the Bristol Police-court, on December 5th, Messrs. W. Tribe and A. N. Price delivered their decision in the case of John Oak, of 40, Frogmore-street, St. Augustine, who was summoned for unlawfully selling as vinegar a pint of liquor consisting of diluted acetic acid and colouring matter. The police were the prosecutors, and Mr. J. H. Clifton defended. The purchase of the vinegar and its analysis have already been proved. Mr. Tribe read the decision of the Bench as follows:—"In this case we have come to a decision of facts before us that the informant was not supplied with the article he demanded, and was thereby prejudiced within the meaning of the words of the Act. We consider the certificate of the Public Analyst is, under the circumstances before us, conclusive on the subject, and therefore we convict. As this is one of the first cases of the kind in Bristol we mitigate the penalty to 20s. and costs." Mr. Clifton asked the Bench if they had considered the defence of warranty which he had set up, and a printed copy of which he produced. Mr. Gore (Magistrates' clerk) said Mr. Clifton offered no evidence under section 25 of the Act on which he relied. The judgment was well considered. Mr. Clifton applied for a case. Mr. Gore said if he asked for a case in consequence of the decision being erroneous in point of law, the Magistrates would, no doubt, be glad to be corrected.

HORLICK'S
MALTED
MILK
For Infants
and Invalids.
CONTAINS PURE MILK, WHEAT AND BARLEY MALT.
NUTRITIOUS, DIGESTIBLE. GUARANTEED ABSOLUTELY PURE.
OF ALL CHEMISTS AND STORES.
SAMPLE FREE. 39, SNOW HILL, E.C.

MEAT EXTRACT REVELATIONS.—IV.

In our last article we gave the analysis of four typical preparations. Bovril, Valentine's Meat Juice, Brand's Essence of Beef, and Liebig's Extract of Meat. Several correspondents have expressed a desire for a comparative series of analyses of extract of meat and of essence of beef, i.e., that we should, bring the essential values of preparations of strictly the same class in a concise form before the public. If we take first the extracts of meat, the two most widely-known are probably Liebig's and Armour's, analyses of these give the following results:

	Liebig's Extract of Meat 2 ozs. 1/2 $\frac{1}{2}$.	Armour's Extract of Meat 2 ozs. 1/1 $\frac{1}{2}$.
Water	16.87	15.65
Fat (Ether Extract)	8.04	2.63
Gelatine and Albuminoids ..	1.85	2.16
Peptones	8.20	8.73
Creatine and Meat Extractives (almost non-nutritious) }	47.32	48.23
Salt	5.08	7.62
Mineral Matters, Salts of Flesh, Phosphates, etc. }	17.46	18.29
Non-Nitrogenous Extractives	0.68	1.49
	100.00	100.00

Regarded solely as typical representations of their class, i.e., as containing essentially only the soluble portions of the meat, with the exception of the albumen which is coagulated, the characteristics of these preparations are a high proportion of matters soluble in alcohol: almost an absence of matters produced either by the prolonged action of heat or by chemical agents on the insoluble portions of the meat (coagulated albumen, fibrine, etc.), such as gelatine peptones and soluble albumen. As regards comparative value, it will be seen that Armour's extract of meat contains first a smaller percentage of water, viz. 1.32 less than Liebig. The gelatine and albuminoids present in Armour's Extract again are 0.81 per cent. higher than in Liebig's Extract, whilst the peptones also show an advantage in Armour's of 0.53 per cent. Taking the two samples as representative of the bulk, Armour's is in a nutritive sense the more valuable preparation. Liebig's, however, as far as an extract of meat goes, has physically to our mind some advantages, the odour being less pronounced; but that is a matter for individual taste, not of nutrient value.

ESSENCE OF BEEF.

By the use of this term the public are led to believe that the jelly-like substances sold as "essence of beef," are really essences in the sense that we use the word in speaking of essence of lemon and the like. This is very misleading, and the amount of ignorance existing amongst the public as to the value of these so-called essences of meat is truly astonishing. It is only a few days since a food expert chanced to meet one of that class of hypochondriacs, who make the fortunes of the Holloway's, Beecham's, Siegel's and Mattie quacks, by fortifying themselves against the ill flesh is supposed to be heir to by taking with them on their travels a miniature chemist's shop. Producing some of this class of essence of beef—weighing about three ounces—he said in tones of triumph, "You see that! there is a guinea's worth of real food there." Judging by the large sale of this class of preparation, there must be some thousands of persons as woefully ignorant of the real food value of an "essence of beef" as was this hypochondriac.

The following are two typical "essences of beef," both largely sold:—

	Brand's Essence of Beef, cost 1s. 2d.	Mason's Essence of Beef, cost 11d.
Water	91.23	77.07
Fat (Ether Extract)	0.18	1.34
Gelatine and Albuminoids ..	1.25	2.56
Peptones	2.54	0.47
Creatine and Meat Extractives almost non-nutritious }	3.96	7.47
Salt	0.45	6.64
Other Mineral Matters	0.89	2.87
Non-nitrogenous Extractives	None.	1.58
	100.00	100.00

We can well imagine some readers in the light of these figures exclaiming with Shakespeare, "Oh, monstrous! but one half-pennyworth of bread to this intolerable deal of sack." 91.23 per cent. of water to 3.79 per cent. of food in the one case, and 77.07 per cent. of water to 3.03 per cent. of food in the other, seems a monstrous small quantity of nutriment to an intolerable deal of water. But taste and faith are everything now-a-days, and until the end of the chapter there will doubtless be persons, like our hypochondriac who, in spite of fact, will still believe that because such preparations are called "Essence of Beef," each small jar contains the concentrated food value of half an ox. In view of facts like these, we may well ask if the time has

not perhaps arrived when it ought to dawn upon our legislators that England is, in some respects, the land of too much freedom, and that we might with advantage take a leaf out of the foreigner's book. In Germany and Italy, for example, the sale of water at 3s. 9d. for 3 ounces as a cure for cancer, and a host of other ills could not take place. No quack nostrum monger has a chance in many parts of the Continent. His mighty secrets and infallible specifics meet with the scantiest support, for almost as soon as he has begun to lay his trap for the gullible, the authorities expose him. Here, on the contrary, they assist him, and offer him every encouragement. The press is dumb to his swindles, because he understands the venality of that "palladium of our liberties." Even mighty *Truth* itself selects its victims for exposure with the keenest of scents for "that which pays it best." Walter Austin, Roberts, and Zierenberg are examples full of significance. They do not advertise, hence they can be rent asunder in one page, whilst in another the virtues of "The Carbolic Smoke Ball" are proclaimed to all who believe in the Gospel according to Labouchere. When the Sequah, Siegel, St. Jacob's Oil, or the like, comes before the public in some places abroad, the state of things is different. At Carlsruhe the local board issue placards exposing impostures. Of one—an alleged cure for rheumatism, affections of the joints, and shooting pains, the placards said: "On analysis this preparation was found to consist of simple plaster spread out and prepared in a most unsatisfactory manner. It has no effect whatever upon the complaints enumerated." A remedy for apoplexy was analysed and proved to be Arnica tincture, coloured red, the value of which would be 8 $\frac{1}{2}$ d. ordinary retail price, but the sale price was 8s. 4d., rather more valuable this than the 5d. ball sold at 10s. 6d., regarding which Labby preserves a discreet silence. But these are nostrums of a class against which intelligent persons can guard themselves. It is not so with patent foods. Here the purchaser must accept everything on trust; human lives are the pawns for the honesty and accuracy of the patent food preparation manufacturers. Analyses of the preparations are obtained from scientists occupying lofty positions, and are ambiguously worded to mislead the uncritical; testimonials and reports are distorted, and the medical profession is bombarded with a storm of pamphlets each proclaiming that this food is the only perfect infants' food, or the other the only perfect food for invalids. The press teems with eulogies of foods specially recommended for infants, of which a large percentage contain ingredients difficult of digestion by the infant stomach. Were it compulsory that each patent food preparation should contain, legibly printed on the label, a full analysis of the constituents of such food, the result would be, no doubt, of great benefit to some of the preparations, but it would lead to others, and those no inconsiderable part, at once coming under the ban, not only of the physician, but of any reasoning person. It has, however, been nobody's business to tell the public what is and is not a genuine useful food, and the consequence is that every one has hitherto been free to do as he pleases, and dupe the public to any extent.

(To be continued.)

THE REAL ANTAGONISTS OF MARGARINE.

The real antagonists of butterine are not the makers of good butter, but those who make a business of buying up at a low price queer or low grade butters, which they work over, and, by the introduction of acids, "convert" into a passable product, which they place on the market at a large profit. These unscrupulous dealers have no use for oleo-margarine, as its purity and healthfulness command for it a place among the legitimate and commendable household commodities, while the dark cellar manipulators have hard work to force their goods, which are not intended for inspection or the light of day.

BEEF FATS.

The following general remarks on beef fat will be found instructive:—Before the day of the oleomargarine industry all fat rendered from the tissues of cattle was known commercially as tallow. Since then differentiation has taken place, and the term tallow is no longer sufficient to designate the several products obtained from the rendered fat of the beef. We have first "butter stock," which is rendered from the caul fat at a low temperature, and from which is manufactured by means of pressure:—

1. Oleo oil.

2. Oleo stearine (beef stearine).

The kidney fat, as a rule, is left with the carcase and constitutes what is known as suet. Marrow stock, as its name implies, is rendered marrow fat, and when properly prepared is almost equal to butter stock in quality. Tallow is made from the trimmings and portions of the viscera. Its colour varies from white to yellow, according to the portions of the animal which have been used and the care with which they have been prepared for rendering and the temperature at which rendered. When freshly and carefully rendered, tallow should show less than 1.5 per cent. of free fatty acid. The tallow on the market will show anywhere from 2 to 10 per cent. Its flavour varies, never being good enough for lard. Tallow grease corresponds to the yellow grease of the hog packer. It is of a dark colour and often contains as much as 50 per cent. of free acid. It is made into low grade soaps.

MESSRS. SPIERS AND POND, LIMITED, FINED £10 FOR ADULTERATION.

The enforcement of the Adulteration Acts ought to be above suspicion, and the Co-operative Society, or the mammoth score be the subject of the Inspector's attention equally with the humblest retailer. Such has not been the case in the past. The Army and Navy, the Civil Service, Whiteleys, the Home and Colonial, Lipton's and like establishments have been left to do as they please. They may sell only genuine articles, but that is not to the point. The enforcement of the Acts should be on an even keel, favouring no one trader more than another. The action of the Camberwell Vestry as shown in the following case is one, therefore, that we hope to see followed by other vestries.

At Lambeth, on December 12th, Mr. Hopkins resumed the hearing of two summonses taken out by the Camberwell Vestry against Messrs. Spiers and Pond (Limited), of New Bridge-street, E.C., for selling milk for which a proportion of the original fat had been abstracted so as to injuriously affect its quality, substance, or nature. Mr. G. W. Marsden, solicitor to the Vestry, appeared in support of the summonses; and Mr. J. P. Grain defended. On November 1st Inspector Collins, an officer of the Vestry, and Dr. Stevens, the Assistant Medical Officer, purchased two glasses of milk at the refreshment-room belonging to the defendants at the Crystal Palace high level station. The samples were submitted to the Public Analyst, who certified that in one case 35 and in the other 63 per cent. of the original fat had been abstracted. For the defence Mr. Grain handed in a warranty under which the milk contractor agreed to supply the defendants with "new milk in good condition, pure and unadulterated, and in the same state as when taken from the cow." Several witnesses were called to show that the milk was sold in precisely the same condition as that in which it was received from the contractor. Mr. Hopkins said he was satisfied that there was no reason to think that this was anything but an accidental occurrence. Everybody who knew anything about Messrs. Spiers and Pond's bars knew that if pure milk was to be obtained it could be got at their bars. But, giving them credit for everything of that sort, he did not think the defendants had got themselves out of the statute, which made the seller personally responsible. He ordered the defendants to pay a penalty of £10 and £2 4s. costs.

We have only just finished the examination of a series of samples purchased from one of the largest stores in the world. In one article, lard, the percentage of beef stearine is very heavy. That this dealer should be able to pursue the practice of adulteration with impunity reflects the gravest discredit upon those responsible for the administration of the acts in his district.

THE LATE PROFESSOR TYNDALL.

THE NEED FOR A SPECIAL SHAPED POISON BOTTLE.

On September 3rd last year, a Mr. Cooper of Birmingham, was poisoned by cyanide of potassium, which he took in the dark in mistake for lavender water, for rinsing his mouth. In the following month, a daughter of Mr. and Mrs. Jones, of Port Madoc, was poisoned by a similar accident, an opium mixture intended for the girl's father being given to her by the mother in error. In January of the present year, another case occurred, showing how easily mistakes in the administration of poison may be made. Dr. Campbell of Radcliffe had two patients, each named William Wright. To one, a carrier, he dispensed aconite liniment for a sprained hand; to the other, a platelayer, he gave a cough mixture. The latter sent his bottle to be re-filled. The doctor was away, and on returning filled the bottle, thinking it was for the carrier. The platelayer took the liniment and died the same night. Had Dr. Campbell used a bottle of pyramidal shape for the liniment he could not possibly have made the mistake which ended in the death of the man Wright.

These are a few typical instances of accidental poisoning of the same kind as that to which Professor Tyndall fell a victim. It is a striking commentary upon our boasted nineteenth century intelligence that so simple a step as that of making it compulsory upon chemists to put all poisons in a special-shaped poison bottle has not been adopted ere this. If any young member of Parliament is burning with anxiety to do something really useful for the public, he could not employ himself better than by drafting a small bill making the use of a bottle of pyramid shape compulsory for poison. By no possibility, were such a course adopted, could a poison, even in the dark, be administered accidentally, as instinct, the moment a person touched the bottle, would warn him against the dangerous nature of its contents.

THE MARGARINE AS BUTTER TRADE.

At the Westminster Police-court, the Westminster Vestry, by summonses, prosecuted three traders—Joseph Corbett, of 69, York-street; Samuel J. Barker, of 28, Rochester-row; and Hannah Harman, 1, North-street, Westminster, for selling margarine as butter. Mr. Warrington Rogers prosecuted for the parish. Mr. De Rutzen fined each of the defendants £5, and 23s. costs, observing that he would do his utmost to put down these frauds on poor people. The defendants or other shopkeepers could sell as much margarine as they liked, but customers were entitled to know that they were buying it.

YEAST ADULTERATION.

Yeast has hitherto received little attention from Food and Drugs Act Inspectors, and in consequence is, in a great many instances, grossly adulterated. It is to be hoped that the percentage of adulteration discovered in the following case is exceptional, but Inspectors would do well to take samples in their districts, and assure themselves that the yeast sold is genuine.

At Edgware Petty Sessions, on November 29th, Elizabeth Hedges, of Pinner, was summoned for selling yeast adulterated with 50 per cent. of starch. Mr. Rawson defended. Mr. Robert Watts, Inspector, deposed to purchasing a quarter of a pound of yeast at defendant's shop. Miss Aldoms served him with a quarter of a pound, for which he paid fourpence. He told her it was to be analysed, he divided the quarter of a pound into three parts, one part he sent to the Public Analyst, who certified it to be adulterated with 50 per cent. of starch. Cross-examined: There was only a woman in the shop when he went in, he asked if they sold cocoa, she said no, they did not sell grocery. Charles Biggs said he was foreman to Miss Hedges, he was present when the Inspector purchased the yeast of Miss Aldoms. Miss Hedges was not able to attend to the business herself. They always used French yeast. When the Inspector came in he asked if they sold butter, cocoa, or chocolate, and Miss Aldoms said no. Cross-examined: He was in the shop on the 23rd of October. The Inspector asked if they kept butter, chocolate, or cocoa. The Chairman said that having regard to the age of the defendant, and the fact that she was unable to attend to the business herself, the Bench thought the case would be met with a fine of 10s., and costs 18s. 6d.

It is a couple of months since we pointed out the prevalence of yeast adulteration, and the above case of *fifty per cent. of adulteration* shows it is high time the practice was seriously grappled with.

PROTECTING THE PURITY OF MANCHESTER MILK.

At Manchester, on December 6th, Henry Joseph Smedley, farmer, Low Farm, Bonsall, Derbyshire, was summoned at the instance of the Sanitary Committee of the Corporation for consigning to John Blackwell, of Derby-street, Salford, milk which was adulterated. Inspector Holland stated that on Thursday, November 16th, he went to the Central Station, and there took from two cans of milk consigned by defendant to Blackwell a sample from each, which he took to Mr. Estcourt, the City Analyst, for analysis. These two samples were certified by Mr. Estcourt to have had fat abstracted to the extent of 46 per cent. and 26 per cent. respectively. The defendant, in answer to the charge, said he could only account for it by the fact that he had been feeding the cattle on chopped straw, grains, and a few turnips. He was very sorry it had occurred, and that he was only a new beginner in the business. The Bench said that the cases were too serious to be dealt with leniently, as in one case very nearly one-half the fat had been abstracted. They could do not do less than impose the full penalty of £20 and costs for such a serious offence.

William Waddington, of 174, York-street, Hulme, was also summoned for selling milk to Inspector Holland which had water added to it to the extent of 8 per cent., and was fined 30s. and costs, previous convictions having been proved against the defendant. Mr. Hookin, solicitor, defended.

Richard Holmes, farmer, of Cowdale, Buxton, Derbyshire, for whom Mr. Beaumont, solicitor, appeared, was also summoned for consigning to Matthew Wild, of Newton Heath, milk which was certified by Mr. Estcourt to contain in one case 19 per cent. of added water, and in another 12 per cent. of added water. A fine of £7 10s. and costs was imposed. Inspector Wheeldon proved the case.

Peter Lofthouse, 46, Ducie-street, C.-on-M., was also summoned for selling to Inspector Holland milk which, on analysis by Mr. Estcourt, was found to contain $7\frac{1}{2}$ per cent. of added water. This being the first offence against the defendant, who has been in business many years, a fine of 30s. and costs only was imposed. Mr. Gardiner, solicitor, defended.

Fanny Elizabeth Middleton, 90, Bradford-road, was also summoned for selling to Inspector Wheeldon milk which Mr. Estcourt proved to be adulterated to the extent of 25 per cent. of added water. A fine of £2 10s. and costs was imposed, this being the second offence. Mr. Gardner, solicitor, defended.

Mr. A. T. Rook, superintendent of the Sanitary Department, prosecuted in each case.

ADULTERATED GIN.

Walter Mellor, Furnace Inn, Milon, Hoyland Nether, was charged with having sold gin which was adulterated. Inspector Bundy deposed to having purchased half a pint of gin for 10d., which upon being submitted to Mr. Allen, Public Analyst, was found to be adulterated. Fined 10s. and costs.

NOTICE TO READERS.

Back numbers of the Journal are now very scarce, and can only be supplied in future at 3d. per copy when over a month old. Vols. 1 and 2, including index, 20s. each. Index separate, 1s. each.

THE UNSOUND MEAT TRADE.

At Swansea, on December 4th, John Mabe, butcher, was charged with exposing for sale in Swansea Market certain meat unfit for human food. Market-inspector Lewis visited the wholesale market on Saturday evening, and found a carcass of beef there so poor and thin as to be utterly unfit for food. Dr. Davies proved the unwholesomeness of the meat. Mr. R. T. Leyson, for the defence, called defendant's son, who said four quarters of beef were taken by the Great Western carman directly from the station to the shambles, where they were left. His father never saw them. Witness took the coverings off, and took the latter to the stall, and the Market Inspector arrived directly afterwards. Mr. Leyson also produced a telegram from a man named Stephen Evans, of High-street, Cardigan, to defendant asking him to sell the carcass for him. The Bench thought the evidence did not bring home the charge against the defendant, as he had not himself seen the meat, and they, therefore, dismissed the case. Mr. Miller said the summons stated that defendant was "the owner of certain meat exposed for sale." Did the Bench decide that defendant was not the owner? The Stipendiary said the meat was in Mabe's possession, and was exposed for sale, but they gave him the benefit of the doubt as to whether he was aware of it.

At Coventry Police-court, on December 2nd, Charles Alfred Hyde, butcher, 19, Well-street, was summoned for being in possession, at his shop in Well-street, of beef that was unfit for food, and also for being in possession of meat at his garden that was likewise unfit for food. The Town Clerk said that on the 2nd ult., Mr. Clarke (Sanitary Inspector) was passing the defendant's shop when he saw three pieces of beef and a heart exposed for sale which he deemed unfit for food. They had a wet and slimy appearance, and were not set and consolidated as good meat was. He seized the meat, although the defendant asked him to let him dispose of it quietly. On being pressed, defendant told him that the rest of the carcass was in his garden at the Holyhead-road, and explained that he was going to boil it down for pigs. The Inspector went to the garden, where he found in bags a large number of pieces of meat without bones. The whole of the meat was condemned by the Medical Officer of Health and the Veterinary Inspector, and was destroyed. The Inspector and Dr. Fenton (Medical Officer of Health) gave evidence in support of the case; and then Mr. Buller, for the defendant, said that Mr. Meadows, a farmer, of Stoneleigh, had a bullock which was accidentally strangled, and the defendant bought the carcass for dogs' or cats' meat. As to the portions in the shop, the defendant thought that as the animal had not died of any disease he was justified in offering it for sale. The Bench inflicted a fine of £10, and costs in the first case, and dismissed the second, although they held that it was one of great suspicion.

In the Stranraer Burgh Court, on December 2nd, John Hamilton, groom, Spirry, Leaswalt, and Andrew Whannel, fletcher, Stranraer, were charged with having in their possession 208lb., or thereby, of meat intended for human food which was unfit for food for man. Hamilton pleaded guilty. Whannel stated that he was not aware that there was any disease connected with the meat, or he certainly would not have purchased it. The Procurator-Fiscal said that Whannel was misled in regard to the purchase. Hamilton had only sold one half of the carcass, and kept the other for his own use, therefore showing that there was no great intention of doing harm on the part of this man. The Provost said the Bench would dismiss Whannel. They were glad to learn that he took such precautions before he offered the meat for sale. In regard to Hamilton, he had no doubt he committed the offence unwittingly, but the Bench had resolved to put down with a firm hand all nefarious traffic in deleterious articles. He imposed a fine of £3, or one month's imprisonment.

Robert Wightman, Little Swinton, Duns, was charged in the Edinburgh City Police-court, on November 30th, with having been the owner of the carcass of a sheep which was on the 24th November condemned as unfit for human food. He said he was shepherd at Little Swinton, and the carcass complained of he killed and dressed and sent to Messrs. Dickson, salesmen, Fountainbridge. When it left him he saw nothing wrong with it whatever, and sent it off with every confidence that it was right. It belonged to Mr. King, his employer. The charge of the stock was left to him, and he considered it best to kill this ewe. Sheriff Orphoot considered the statement as a plea of not guilty, and, on the application of the prosecutor, the case was continued till Saturday. James Cairns, Whitecross, Aytoun, was afterwards charged with having been the owner of the carcass of a sheep similarly condemned on the 23rd November. He pleaded guilty. Mr. Doughty, solicitor, Aytoun, said the animal was one of a lot of young sheep, and it was quite a common thing for one or two of a flock to die from eating the sand which was on turnips in wet weather. There was no organic disease, and the meat was good. Apparently when killed it had not bled well. Mr. Cairns saw the carcass himself before it was taken away, and believed it a perfectly sound one. For seven or eight years he had been in the habit of sending carcasses to the market from two farms, and never before had a complaint. The prosecutor said his information was that the animal died from inflammation. The Sheriff expressed the opinion that it must have died of acute disease, and inflicted a modified fine of £5, with the alternative of thirty days' imprisonment.

COFFEE AND CHICORY.

At Grimsby, on December 5th, Charles Cox, Stallingborough, pleaded guilty to having sold coffee as pure when it contained 85 per cent. of chicory. Fined 20s. and 5s. 6d. costs. Superintendent Stennett pointed out to the Bench that the County Council got the fine, and therefore, in other courts, the costs had been reduced to one-half.

LARD PROSECUTIONS.

At Bristol Police-court, on December 5th, Messrs. S. Wills and F. J. Fry tried several cases in which Bristol grocers were summoned for alleged infringements of the Food and Drugs Act. Mr. E. J. Taylor, from the Town Clerk's office, appeared to prosecute, and Mr. J. H. Clifton defended in the case of Roland Gibbs, grocer, of Stapleton-road, which had been adjourned—leading to the postponement of other cases—in order that an analysis might be made at Somerset House of some lard respecting which the infringement of the Act was alleged. Mr. Wills read a certificate from the Analysts of Somerset House which stated that the samples of lard submitted to them contained not less than 15 per cent. of beef stearine. The Magistrates' Clerk (Mr. Gore): The very words used by Mr. Stoddart. The Bench said that under the circumstances they would impose a mitigated penalty of 20s. and costs. Mr. Taylor asked the Magistrates to allow the expense of the analysis at Somerset House, which was granted. The other adjourned cases were then taken, the first being that of Fredk. William Johns, of Lawrence-hill, who sold to Inspector White lard which on analysis was found to contain not less than 15 per cent. of beef stearine. Mr. Clifton appeared for the defendant, and asked that the decision might be withheld until the next case had been heard. Similar testimony was given by Inspector White in regard to a summons against Frederick Price, of Lawrence-hill. Mr. H. R. Wansbrough, for the defence, said his client pleaded guilty to a technical offence, but the case was clearly one in which the penalty should be small. Mr. Price actually purchased the lard he sold to the Inspector from Mr. Thomas Sheppard, who had been charged with a similar offence. Mr. Sheppard, however, produced a warranty, and the Bench dismissed the case, and absolved the defendant from blame. Unfortunately Mr. Price, although he sold the same lard, had no warranty. The Magistrates imposed a fine of 20s. and costs in each of the cases of Johns and Price, observing that they were satisfied the defendants did not intend to commit a fraud by selling the lard in question. Geo. Voakings, of 7, Paul-street, Bedminster, was summoned for a like offence. Mr. Hirst (Messrs. Gregory and Hirst) defended. Inspector Drew proved the purchase of lard from defendant, and that the Analyst certified that it contained not less than 15 per cent. of stearine. Mr. Hirst observed that the lard was sold just as it was purchased from the wholesale dealers. Mr. Fry remarked that it was hard on the retail dealer, who bought and sold the lard in good faith. The law, however, was such that the Bench were obliged to impose a fine, which would be 20s. and costs. James Harding Mills, of 84, Redoliff-hill (for whom Mr. Clifton appeared), was summoned for selling adulterated lard. The purchase and analysis having been proved, the defendant deposed that he purchased the article as pure lard, and sold it as such, and produced invoices and labels to show the nature of the lard. Mr. Clifton said that there was no actual merit in the warranty. It was for the Magistrates to say whether a warranty was intended. Mr. Fry said the law compelled them to deal with the actual seller. The frauds were apparently committed in America. The Bench considered that the documents defendant produced as to warranty brought him within the 25th section of the Act, and dismissed the case. George W. Harris, of Langton-terrace, Bedminster, was fined 20s. and costs for selling adulterated lard. The circumstances of the case were on all fours with those already decided. Thos. W. Nobbs, 1, Allington-road, Bedminster, was proved to have sold lard containing 10 per cent. of stearine according to the analysis of Mr. Stoddart, and 20 per cent. according to the authorities of Somerset House. Mr. Clifton claimed exemption under subsection 1 of section 6 of the Act. He pointed out that the greater portion of the lard consumed in this country came from America, where in order to fit it for transport, it was mixed with a wholesome substance called stearine, which did not prejudice its quality. Mr. Fry said it could not be made out that beef stearine was lard, however pure it might be. Mr. Clifton intimated that he was about to call evidence. The Clerk said this appeared a defence which was sprung on the prosecution, and it would have been better if Superintendent Wedmore had had professional assistance. Mr. Clifton observed that after this expression of opinion he would not present witnesses. No doubt there would be other cases until the authorities ceased persecuting. (Laughter.) Mr. Fry agreed with Mr. Clifton as to the importance of a case being argued in the higher Courts. Defendant was fined 20s. and 9s. costs. William Sheppard, 104, Redoliff-hill, was summoned respecting the sale of 11b. of lard to Inspector Thomson, on October 3rd. Formal evidence was given by Inspector Thomson, and defendant was fined £1 and 8s. costs. Mr. Clifton asked the Magistrates for an expression of opinion to the effect that there was no moral obloquy on the defendants in the cases which had been heard. Mr. Wills said there was not the slightest reflection on them. They had simply sold the lard as they bought it in the ordinary way of trade.

GIN AND 42 PER CENT. WATER.

George Chaffers, publican, Osgodby, was charged at Market Rasen by Inspector Taylor, who said that he visited defendant's house and asked for the bar where spirits was sold. He was shown in, and out of a particular vessel he ordered a pint of gin, which he bought for analysis. The quantity was divided into three parts, and he produced the report of Dr. Muter, County Analyst. The gin was diluted with 42.4 per cent. of water, 35 being the maximum allowed. Defendant said he could not account for the adulteration. He bought it in the town, but did not say where. The Chairman said the Bench were of opinion that this useful Act was not put into operation often enough. More tests ought to be made for the protection of the public, and they intended to make an example of offenders. Fined 30s. and 4s. 6d. costs.

ADULTERATED DRUG PROSECUTIONS.

At the Bishop Auckland Police-court, two summonses were heard against Mr. John Shaw, chemist, of Newgate-street, charged with selling adulterated tincture of rhubarb and sweet nitre. Mr. T. Dunn, Inspector, prosecuted, and Mr. Shaw was represented by Mr. Booth. Mr. Dunn stated the defendant's solicitor had given him notice, under Section 25 of the Act, that he intended to shield himself under that section, on the strength of something in the form of a warranty which he had in his possession. The warranty, so-called, however, was only an invoice on a billhead with certain items written underneath, and that had been covered by the case of *Wardlaw v. Wilson*, which had been very much misunderstood. An ordinary invoice with a few words upon it did not constitute a warranty. The question was not a moral but a legal one. The Act was passed for the protection of the public, and if the defendant felt himself aggrieved he could shield himself under Section 28, which distinctly said that where any person was brought up for breach of contract, such person might recover the amount of the penalty in which he might have been mulcted. William A. Suddes, assistant to Mr. Dunn, said on the 14th November he visited Mr. Shaw's shop and was supplied by the defendant with six ounces of tincture of rhubarb. He divided it in accordance with the Act, giving the defendant one part and the other two he handed to Mr. Dunn. Mr. Dunn said he forwarded the part handed to him by Suddes to the county analyst, who had reported that it was deficient in proof spirit to the extent of 14 per cent. In other words, 14 per cent. of extraneous water was present. He was of opinion that such sample was not a sample of genuine tincture of rhubarb. Mr. Booth said he would address the Court after calling his evidence. Mr. Shaw, the defendant, then went into the witness-box, and said he purchased the tincture of rhubarb some time ago from a good wholesale house as of B.P. strength, such as was recognised by the British Pharmacopœia, and received a document along with it. The label was printed, and the words B.P. were also expressed on the invoice. The tincture came to hand three weeks or a month before the visit of Mr. Dunn's assistant, and he was the first served out of it to the best of his recollection. The day was a cold one on which he was served, and no doubt that caused the strength of the proof spirit to deteriorate. A cold day would be more likely to cause the spirit to evaporate, and he could not account for it losing strength except through the evaporation. There had been nothing added; it was sold just as he received it. He had been in business sixteen years, and that was the first case of the kind brought against him. He took every precaution to have his drugs pure and of the best strength. Cross-examined: He kept no tincture of rhubarb except B.P. Mr. Booth submitted that the case was covered by the written warranty. If the Bench was against him on that, he contended that there had been no intention shown to act to the prejudice of the purchaser inasmuch as Mr. Shaw had supplied the best article he could. Then, it was also laid down in "Stones' Justices' Manual" that where an article deteriorates in the course of keeping for the purposes of trade, it did not bring the seller within the purview of the Statute. The tincture would deteriorate by being taken out of the bottle on a cold day, and that was the only way in which the reduction in the strength could be accounted for. Moreover, if the Bench were against him on the legal points, he respectfully submitted that it was a case that would be met by the payment of the costs. Mr. Lingford: Had the bottle an ordinary cork on or a glass stopper? Mr. Shaw: It had an ordinary cork on and the usual wrapper. The Chairman (Mr. Pears): We find as a fact that the invoice does not constitute a warranty. The case is not a very serious one, and we think it will be met by a fine of 2s. 6d. and costs.

Mr. Shaw was next summoned for selling sweet nitre that was deficient in nitrous ether. Mr. Booth said practically the same state of facts applied in this case as in the last. Mr. Suddes proved the purchase of six ounces of sweet nitre, one part of which he handed to Mr. Dunn, and that gentleman said he had forwarded it to the County Analyst, who had reported that it was deficient in nitrous ether to the extent of 60 per cent., after making due allowance for trade contingencies. It was not, he added, a sample of sweet nitre B.P., and was useless for the purposes intended. Mr. Booth said the facts were the same. The nitre had been in stock all the summer, and during that time the evaporation had gone on, and so reduced the strength. Mr. Shaw gave the best price and received the same warranty as in the other case. The Chairman: He will be fined 2s. 6d. and costs in this case. We hope all gentlemen in the trade will go through their stocks.

SERIOUS CHARGE AGAINST HACKNEY OFFICIALS.

We hope for the credit of all concerned that the following allegations against the Hackney officials is not true. If it be accurate, it discloses a state of things requiring immediate reform.

On December 4th a woman told Mr. Lane, at North London Police-court, that for five months she had endured an awful state of insanitation at her house. She went to the Hackney Sanitary Authority and they sent an Inspector, who was so impressed with the bad odours that he had to put his handkerchief to his nose. The officer went away, but apparently took no further action, for nobody came to see to the drains. After this she had illness in her house and made a further complaint, but with no effect; and now she had come to ask the assistance of the Court. Mr. Lane: This seems most extraordinary conduct on the part of a public authority. Where do you live? The applicant: Poole-road, South Hackney. Mr. Lane directed Inspector Scott to cause inquiries to be made.

HOAXING "ANSWERS."

In its issue of December 9th, our contemporary says, under the heading of "How Food Adulterators are Detected"—

"Very few people are aware that samples of metropolitan foods and liquids of all kinds which are demanded from shopkeepers and publicans by the Inland Revenue officers are immediately sent for analysis to Somerset House, where a laboratory has been established for the last half century, employing over sixty skilled assistants, and using a hundred and fifty different chemicals."

It is news to us that Inland Revenue officers take samples, and that they are immediately sent for analysis to Somerset House. The officials, says *Answers*—

"Have some remarkable stories to tell, for we learn that two years ago the consumption of methylated spirit among felt hat makers (who use it for dissolving shellac), photographers, and varnish-makers, increased to such an extent that an inquiry was made, and it was found that the workmen actually drank it in large quantities, so petroleum spirit was added to make it more nauseous; but even now there are hardened sinners who hold their nose and gulp down the fiery mixture of naphtha and alcohol."

"On one occasion a seiditz powder from a suburban shop was forwarded for analysis, and the assistants were horrified to find that it contained a quantity of antimony instead of tartrate of soda. It appeared that only two of the packets had been sold, and the purchasers of these were seriously ill; indeed, were it not that the other ingredient of the powder acted as an emetic, the blunder would have proved fatal."

"Going through the laboratory, with its innumerable bottles, retorts, and apparatus, one sees samples of every kind of food, from tea and coffee to meat extract, and sealed bottles containing beer, wine, or spirits just received from the Revenue officers, with all particulars concerning the vendor on the labels."

They do not appear to have told the voracious *Answers'* scribe about their exploits with "denatured snuff," and how many thousands of pounds their incompetence and ignorance cost the Inland Revenue in these frauds. In fact, we doubt if they told the *Answers'* writer anything whatever, for we do not believe even Somerset House *pseudo* scientists to be so ignorant as to inform any interviewer that Inland Revenue officers demand samples of metropolitan foods and liquids and send them for analysis to Somerset House, inasmuch as they do nothing of the kind. It is a great pity that such twaddle should find its way into print.

SUPPRESSING ADULTERATION AT DEAL.

At Deal Petty Sessions, on November 30th, Mr. George Edwards, of the Rose Hotel, was summoned for selling half a pint of whisky, 7·45 degrees, and half a pint of gin, 3·45 degrees below the legal limit. Police-constable Love proved the purchase when in plain clothes, and Superintendent Kewell deposed to dividing and forwarding the samples to the Public Analyst. He produced a certificate of the result of his analysis, which showed that the whisky was 32·45 under proof; 25 being the legal limit, made the sample 7·45 below the legal limit of strength; and the gin 38·45 below proof; the legal limit being 85, left the sample 3·45 below. Defendant said it arose from a pure accident on his son's part, while he was laid up. He always had his whisky broken by the merchant to 22, instead of 25, and gin to 33 instead of 35. To show it was an accident, his spirits were broken down with distilled liquor, so as to make them bright, and if he added the ordinary water, they would be dull and his object would be defeated. The Mayor said the penalty was exceedingly heavy, but they would only fine defendant 40s. and 7s. 6d. costs in each case, or £4 15s. in all.

Adolphus Banger, grocer, was summoned for selling 1 lb. of butter, not of the quality demanded, being 23 parts butter, and 77 parts foreign fat; and further, 1 lb. of margarine, the same not being in the packet duly branded as required by the Margarine Act, on the 23rd October. Police-constable Love proved the purchase. Superintendent Kewell also gave evidence. He might have brought another charge, for not displaying the word "margarine" on the bulk. The two cases were taken under different Acts, but arose from the same purchase. Every publicity had been given to the law in this matter. A short time ago he had two cases, and he stated publicly in court that he could have brought a second charge as to the margarine, and it was reported by the Press. He had been careful to give the public warning. Defendant said he was very sorry, but it was a mistake that it was not served in the proper paper, and the card had dropped down behind the table, or it would have been in its place. There was no wilful intention of defrauding the public, who had the full value for their money, just as the margarine was supplied from the merchant. A fine of 40s. and 7s. 6d. costs in the first case, and 10s. and 7s. 6d. costs in the other, was imposed.

"FOOD & SANITATION" has over 50,000 Readers: Medical Practitioners, Sanitary Inspectors, Food and Drugs Acts Inspectors, Wholesale and Retail Grocers, Weights and Measures Inspectors, Town Clerks, Solicitors concerned with the Food and Drugs and Public Health Acts, Surveyors, Medical Officers of Health, and the General Public.

WHAT IS MALT VINEGAR?

At Manchester, on December 6th, an important case affecting the sale of vinegar was brought to a conclusion. It was a summons against a shopkeeper for selling as vinegar an article which was alleged in the summons to have contained upwards of 50 per cent. of mixture of pyroligneous acid and water. Messrs. Champion, the well-known manufacturers of vinegar, had supplied the article which was complained of, and they took up the defence of the case. Mr. C. J. Cooper (Cooper and Sons) appeared on their behalf. The case had been several times before the court, and Mr. Estcourt, the City Analyst, had stated that the sample of vinegar submitted to him contained acetic acid, which was not produced by fermentation, but was derived from pyroligneous acid. The last adjournment was for the purpose of getting the authorities at Somerset House to analyse the vinegar. The Somerset House certificate was now put in, and was as follows:—"We hereby certify that we have analysed the vinegar, and declare that it contains 4.6 per cent. of acetic acid, and we are of opinion from the consideration of the results of the analysis that the sample does not contain pyroligneous acid, but that the acetic acid present is derived from the aceticification of alcohol produced by fermentation in the manufacture of vinegar. We are further of opinion that the sample corresponds to a commercial malt vinegar.—J. Bell, F.R.S., R. Bannister, F.I.C., F.C.S., G. Lewin, F.I.C." Under these circumstances, Mr. Rook, superintendent of the Sanitary Department, who conducted the case for the Corporation, said he would ask the Bench to dismiss the case. He would point out, however, that there were no details in the Somerset House certificate. Those details were very important to the Corporation, and if there were any means of obtaining them they would be very glad if the court would assist them. The Corporation did not agree with Somerset House in this matter, but the case having been decided against them they would not be unreasonable, and they thought that reasonable costs might be allowed to the defendants. Mr. Cooper said he applied for costs as against the Corporation. On the analysis of Somerset House he said the summons ought never to have been issued. Messrs. Champion had been put to considerable expense in this matter, the list of costs amounting to £72. Mr. Rook said Mr. Estcourt was desirous of having the details of the analysis for the purpose of further ventilating the question through the public press, because he did not agree with the Somerset House people, and a good many other Public Analysts did not. Mr. Le Court (Magistrates' clerk) said he did not see how the court could help Mr. Rook in the matter. It was for the Corporation to apply for the details. The Bench dismissed the summons, and allowed the defendants £5 costs.

DRUG ADULTERATION.

At Skipton, on November 25th, Christopher Barker, grocer, Glusburn, was summoned by Mr. A. Randerson, Inspector under the Food and Drugs Act, for selling tincture of rhubarb which was not the substance and quality demanded. The Inspector's evidence was that on the 19th ult. he visited the defendant's shop and purchased 3 ozs. of rhubarb for analytical purposes. This was forwarded to Mr. Allen, the County Analyst, whose certificate showed that the sample contained:—Extracted matters 3.49; absolute alcohol, 81.39; and water, 65.12. The certificate also stated that the above results were such as would result from the dilution of two parts of tincture of rhubarb of good quality and full alcoholic strength, with one part of water. In addition to the excessive water, the sample was entirely destitute of saffron, which is directed by the British Pharmacopoeia to be employed in the preparation of tincture of rhubarb in the proportion of a quarter of an ounce to the pint. The defendant informed the Bench that the tincture of rhubarb complained of was bought by him along with the other stock in the shop from the previous occupier. He had simply sold the liquid as he bought it, and certainly he never added water to it. The Chairman thought the seller was to blame, but unfortunately they could not get at him. The defendant, being asked what he paid for the tincture of rhubarb, replied that he paid 2s. 10d. per pound. The Chairman: Yes, you pay this low price and the result is it is not guaranteed to you. The defendant said he had not sold an ounce of tincture of rhubarb since entering the shop except to the Inspector. The Chairman, announcing the decision of the Bench, said the Magistrates wanted it to be well understood, that in any future cases of adulterated drugs the full penalty of £20 would be inflicted. To sell adulterated drugs was a most dangerous practice, because medical men who gave certain prescriptions could never be certain that they were up to their proper strength. The consequence was that if a person did not get what was ordered, fatal results might ensue. The defendant would be fined 20s. and costs—the latter amounting to £1 12s. 6d.

YEAST !! YEAST !!

JANSEN & COMPY.,

WESTMOLENSTRAAT, SCHIEDAM (HOLLAND).

Gold Medal, Amsterdam, 1886.

A GOOD RELIABLE PURE YEAST IS

JANSEN & CO'S PARROT BRAND.

TRY IT !!!

MAY BE ORDERED DIRECT FROM OUR MANUFACTORY, FRESH SHIPMENTS DAILY.

METROPOLITAN DAIRYMEN'S BENEVOLENT INSTITUTION.

The 19th, Anniversary Dinner of the Metropolitan Dairymen's Benevolent Institution was served on December 7th, at the Freemasons Tavern. The chair was taken by Mr. S. J. Pocock, and the 300 guests included Mr. F. C. Frye, M.P., Mr. Crosthwaite, Mr. Munro, Mr. Stanbury, Mr. A. Robinson, Mr. W. T. Ricketts, Mr. F. J. Lloyd, Mr. F. Ramsey, Mr. W. J. Batho, Mr. T. Stone, Mr. James Leggett, Mr. C. H. Dancocks, Mr. J. Hatch, Mr. R. Atkinson, Dr. F. W. Andrews, Professor J. Long, Mr. J. Welford, &c.—The object of the institution is the relief of deserving members of the trade and their widows in old age and infirmity by pensions, and of the orphans of annuitants by gratuities. Since its foundation in 1874 58 male and female candidates have been admitted to its benefits, 34 of them being at present on the register, and in receipt of annuities of from £18 to £24, amounting to a total of £624 per annum. Mr. A. Robinson, in a humorous speech, in which he alluded to the apposite overflow of the milk of human kindness on the present occasion, was somewhat severe on the overflow of foreign substances masquerading as butter. He complained of the retrogression of agriculture owing to the lack of scientific interest, and recommended that the farmers' daughters should devote their attention to butter making. If more butter was made they would do better all round, and would have fewer calls on their charity. Mr. F. C. Frye, in responding for the Houses of Parliament, referred to the effort made by Dr. Cameron and himself to introduce a Bill amending the Adulteration Act, so that the percentage of water in milk should be settled by Parliament, and not according to the fancies of metropolitan Magistrates. In proposing "Success to the Metropolitan Dairymen's Benevolent Institution," the chairman alluded to its present healthy condition and its objects. The recipients of relief were mostly over 70 years of age, and great care was taken to select those thoroughly deserving of charity. He touched on the particularly exhausting character of the trade, the members of which had to work all the year round, Sundays and Bank holidays included, for if they ceased their dispensation of the life-sustaining fluid for a single day, there would be such a howling of babies throughout London as had not been heard since the time of Herod. He referred to the recent establishment of collecting boxes, the whole of which were not yet in, but which had resulted, up to the present, in the collection of £175. The championship for the largest collection had been won by Mr. Stables, of Wandsworth-road. The present year had been a very black one, not only to farmers but to dairymen in towns and cities, and there was therefore all the more need for liberal support to this charity. In spite of these discouraging circumstances he had great pleasure in announcing contributions amounting to £1,100. A good selection of music was rendered by Miss G. Izard, Miss F. Foxcroft, and Messrs. W. H. Wheeler, W. Syckelmoore, and W. Edwards.

Mr. Lloyd did not explain the "8 per cent. water herd of cows," and missed what ought to have been an opportunity for making the figures public. Will anyone ever see those figures.

FRAUD FOSTERING COUNTY COUNCILS.

This is how a Cambridge contemporary takes its County Council to task. The *Cambridgeshire Weekly News*, of Friday, December 1st, asks "Is the Cambs. County Council Asleep?" saying:—

"The Cambs. County Council appears in the list of authorities where 'there is in effect no check upon adulteration, because the local authorities charged with the administration of the Sale of Food and Drugs Acts neglect to exercise their powers.' If it is true that during a whole year not a single sample was taken by our County Council, it is high time that some enterprising member endeavoured to ascertain the reason for this singular omission. We should have thought that the Cambridgeshire farmers on the Council would have been alive to their own interests. They grumble enough about adulterated articles from abroad being substituted for and ousting from the markets genuine home products; and yet they sit supinely by and allow matters to go by default. Let it be understood that we make no charge against Cambridgeshire tradesmen collectively or individually; we believe that they are as honest a body of men as are to be found in any county in England. But that does not relieve the County Council of its responsibility under the Sale of Food and Drugs Acts."

We shall be curious to see if this rebuke will have any effect upon this long-offending body.

POWELL'S BALSAM OF ANISEED—FOR COUGHS.

Powell's Balsam of Aniseed—Coughs and Asthma.
Powell's Balsam of Aniseed—Coughs and Bronchitis.
Powell's Balsam of Aniseed—Coughs and Hoarseness.
Powell's Balsam of Aniseed—Coughs and Lung Troubles.
Powell's Balsam of Aniseed—Coughs.—Safe and Reliable.
Powell's Balsam of Aniseed—Coughs.—Established 1824.
Powell's Balsam of Aniseed—Coughs.—Refuse Imitations.
Powell's Balsam of Aniseed—Coughs.—Sold by Chemists.
Powell's Balsam of Aniseed—Coughs, Night Cough, Influenza.
Powell's Balsam of Aniseed—Coughs Relieved Instantly.
Powell's Balsam of Aniseed—Coughs.—The Oldest Remedy.
Powell's Balsam of Aniseed—Coughs.—Trade Mark.
Powell's Balsam of Aniseed—Lion, Net, and Mouse.
Powell's Balsam of Aniseed—1s. 1½d., 2s. 8d.

PEPPER ADULTERATION.

At Glasgow Sheriff Summary Court, on December 8th, Sheriff Birnie imposed a fine of 5s., with 23s. of expenses, upon Alexander Cook, grocer, 550, Gallowgate, for having, on the 10th ult., sold to Sanitary Inspector Inglis 1lb. of white pepper, which contained 20 per cent. of extraneous starch. Respondent said that he bought it as the best pepper, and sold it as he got it.

If this be so, Mr. Cook ought to bring an action for damages against the firm from whom he purchased it.

CORRESPONDENCE.

MEAT EXTRACT REVELATIONS.

To the EDITOR of FOOD AND SANITATION.

DEAR SIR,—I have read with great interest the papers on Meat Extract Analyses. Personally, I have never believed in or used Valentine's and one of the other preparations you mention, but have used Bovinine, Liquor Carnis, and Barff's Kreochyle, chiefly the two former. I should like to know the comparative nutrient value of these. I suppose you would not sample and analyse one of these, of the Liquor Carnis Company. I think the profession and public should know what they can use, as well as what they cannot. I have obtained excellent results from the above and should like to know if they are illusory. What about Bouillon Fleet and Invalid Bovril?

Yours,

HARDING H. TOMPKINS.

36, Ventnor Villas,
Hove, near Brighton.

[Invalid Bovril was dealt with in our issue of November 18th. The analysis of Bovinine, respecting which so many medical men have written us, will appear next week. The other preparations will be dealt with shortly.]

WHAT IS MALT VINEGAR?

To the EDITOR of FOOD AND SANITATION.

SIR,—The correspondent, signing himself "Brewer," whose letter appeared in your last issue, having confined his communication simply to an expression of opinion, a lengthy response from me is uncalled for.

While expressing his conviction that vinegar brewed from germinated barley possesses aromatic properties peculiar to this source, he adds that some there are who maintain the superiority of this article: if I am correct in my interpretation of this wording, he does not appear to endorse the latter view, and he will perceive by my former letter, November 4th and 11th, that on this and some other points I am at one with him. I have not throughout this correspondence advocated, nor do I now do so, the use of any *one* hydrolyst in particular: the goal of the vinegar maker brewing from grain is malt vinegar, and I argue that he should be allowed to reach this goal in the best way he can, obtaining all its desirable characteristics, including the "aromatic properties."

On the presumption that by "glucose" he means dextrose, I may here state that this is the outcome of all starch hydration, and being, together with the "aromatic properties," a carbon compound,

it is evident that the hydrolyst (only one of which, as far as I am aware, comes under this category) can form no portion of its constituent parts. The distaste of all germinated grain is a nitrogenous matter, and as such is undesirable, imparting no refreshing or agreeable aroma, but quite the contrary, assisting in destroying it, therefore it is not to this substance to which we must look to account for the pleasant odour of good vinegar, which is really due to the formation, in the process of brewing, of that intricate matter conveniently named fusel oil, and its isomers, acetic and butylic ethers, &c., also, in a great measure, to the manipulation in the course of oxidation.

In the matter of hydrolysts, I say, take the cleanest. Let the manufacturer use his judgment and skilled experience without hindrance, enjoying the same freedom in his choice of grain. "Brewer" puts barley and rice in comparison. I take his selection and put the comparison into figures derived from competent authorities, viz. :—

COMPOSITION PER CENT. OF BARLEY AND RICE.

Starch.	Cellulose.	Nitrogenous Substances.	Ash.	P ₂ O ₅
Barley 50 to 70 ..	8 to 11 ..	12 to 16 ..	2 to 3 ..	0.95 to 1.18
Rice.. 70 to 89 ..	0.2 to 3 ..	7 to 8 ..	0.8 to 0.9 ..	0.6

I make no remarks on these figures, only giving them as "Brewer's" selection.

Next, I must confess, "Brewer's" remarks notwithstanding, I am undisturbed in my opinion that most industries have benefitted by the scientific introduction of improvements, one of which, as stated by me, is the modern method of malting, and in this view I am supported by the majority of the brewers of the kingdom, the largest of whom, wisely or unwisely, retain the service of clever chemists.

I trust that "Brewer" and other readers of this correspondence will keep in mind that I am not posing as a partizan for any special or exclusive method of bringing about the hydrolysis of starch of grain for beer or vinegar production, but for full liberty to the honest manufacturer to obtain the best product his means and knowledge allows, unfettered by officially usurped discretionary powers.

I desire that common sense shall rule procedure, and an important trade be free from annoyance caused by pedantic and narrowly intolerant conception of trade terms, and that manufacturers successfully defending themselves against unsustained attacks shall not suffer the loss of time and legal expense, and be expected to be satisfied with an allowance of about 5 per cent. of money disbursed. One may well hesitate in deciding whether a victory, under these circumstances, is not worse than defeat. I am sure that sorely tried commercial men must have been comforted that a more liberal and enlightened view has recently prevailed upon appeal.

In conclusion, let me assure "Brewer" that there are many analysts, with the diffidence characterizing the true student of nature's laws, who feel their weakness in the matter of vinegar analyses, and want of reliable foundation for determination of origin, and this knowledge of their deficiency will in time add to their strength and dignity. I hope the same consciousness will animate "Brewer," and that he will feel with these Analysts that he has yet something to learn.

While my modesty forbids me to speak of my own proficiency, my vanity prompts me to still sign myself, yours faithfully,

EXPERT.

J. TRAVERS & SONS, Ltd.,

119, CANNON STREET, LONDON, E.C.,

WHOLESALE GROCERS, SPICE GRINDERS, &c.

SPECIALITIES IN PACKED GOODS.

"Ship" Brand First Quality Canned Fruits, Meat, Fish, &c.
"Penguin" Brand Salmon.
"Fountain" Brand Salmon.
"Opposum" Brand Tomatoes.

Tobacco Pepper. Sauce.
Ground Spices. Curry Powder.
Flour. Maize. Meal. Hominy.
Oatmeal.
E Lead.

SOLE AGENTS FOR THURBER'S AND GODILLOT'S CANNED AND OTHER GOODS.

The following is extracted from "THE ANALYST," for March, 1893.

"THE COMPOSITION OF MILK AND MILK PRODUCTS.

25,931 SAMPLES were Analysed in 1892, in the LABORATORY of the

AYLESBURY DAIRY COMPANY, LTD.,

St. Petersburg Place, Bayswater, London, by M. H. Droop Richmond, F.I.C., F.C.S.,

Member of the Society of Public Analysts, the Company's Resident Analyst.

The Samples comprised :—

23,865 of MILK, 566 of CREAM, 8 of BUTTER-MILK, 78 of BUTTER, 24 of WATER, and 22 of SUNDRIES."

"SOLAZZI."

THIS is the purest Liquorice Juice obtainable. It is a guaranteed specific—in fact, **Nature's Own Remedy** for Winter Coughs, Colds, and all Chest Affections.

Avoid patent medicines; they often contain dangerous drugs; and try this safe and effective remedy, provided by kindly Nature.

"By far the best and purest."—*Health*.

"The most esteemed of all."—*The Chemist and Druggist*.

The public are warned against cheap, adulterated brands—**insist on SOLAZZI.**

OF ALL CHEMISTS, CONFECTIONERS, STORES, &c.

IRVEN BROTHERS,

Bank Buildings, Victoria Street, } **LIVERPOOL.**
Entrances—Sir Thomas's Buildings & Cumberland Street,

WARRANTED PURE

"LI-VER" BRAND OF LARD.

BALLARD'S MALT VINEGAR.

BREWERY—COLWALL, MALVERN.

GUARANTEED ABSOLUTELY PURE.

IMPORTANT TO GROCERS & BAKERS.

If you wish to **AVOID** loss of money, repute and trade, caused by **PROSECUTIONS** for **ADULTERATION**, **SELL ONLY YEAST** manufactured by the following Firms:

C. A. BEUKERS.
W. A. BEUKERS.
P. BOEZEMELJER & CO.
A. DAALMEIJER.
J. H. VAN GENT.
HAMER & CO.
HOEK & CO.
J. HOUTMAN.
JANSEN & CO.

H. C. JANSSEN.
JANSSEN & TAK.
VAN KAN & CO.
M. KRANEN.
P. J. LAGERWEIJ.
P. J. MEIJER.
THs. Cs. MELOHERS.
NIEDFELD & CO.
P. SCHILTMAN.

J. J. TONINO.
J. VAN DER VALK & CO.
JAN VRIJLAND.
VRIJLAND VAN DEN HOOGEN & CO.
WALRAVEN BEUKERS & CO.
B. A. J. WITKAMP.
J. WITKAMP & CO.
P. J. WOUTERLOOD.

The above Firms are Members of the

YEAST UNION, SCHIEDAM,

And guarantee their Yeast absolutely pure and free from any adulteration whatever.

Every Package bears



their Trade Mark.

Every shipment to England is Analysed, and any Member of the Yeast Union, Schiedam, guilty of adulterating Yeast would be fined heavy penalties.

NOTE: Yeast Union (Schiedam) Yeast is guaranteed free from Adulteration. Resist all inducements to deal in any other Yeast.

THE PUREST OF ALL SCOTCH WHISKIES.

D. LENNOX & SONS

LONDON OFFICE :

41, PALL MALL,
S.W.

Bonded and

Bottling Stores

DUMFRIES,
N.B.



LENNOX'S WHISKY

36/-

42/- 48/-

PER DOZEN CASH.

Delivered within London
Carting Circuit, or Carriage
Paid to nearest Railway Station
in Great Britain.

Do not drink Blends of Malt Grain
and Potato Spirit.

Medical Men and Connoisseurs will find this the
perfection of an absolutely pure & wholesome spirit.

FOOD & SANITATION,

A Journal for Manufacturers, Merchants, Wholesale and
Retail Traders, Grocers and Provision Dealers, Dairy
Farmers, English and Irish Produce Merchants and Bacon
Curers, Pure Beer Brewers, Distillers, Fruit Growers,
Agriculturists and Medical Men.

PUBLISHED WEEKLY

M. HENRY, at 183, STRAND, LONDON, W.C.

SUBSCRIPTION: PER ANNUM, POST FREE, 6s. 6d.

Food and Sanitation.

SATURDAY, DECEMBER 23, 1893.

W. T. STEAD AND THE MATTEI QUACK
CANCER CURE SWINDLE.—V.

"DAILY PAPER" SUBSCRIBERS DEMAND THEIR
MONEY BACK.

More than a month has elapsed without an explanation having
come from Mr. Stead concerning his connection with the Mattei
quack cancer cure swindles. We can, however, well understand
Mr. Stead's desire to, like Brer Rabbit, "lay low," because, for the
first time in the career of this charlatan he has been thoroughly
dissected. About politics and religion people may quibble as
they please, but upon shameful swindling, such as
that practised by the Mattei gang; upon the callous calculation
that every one of the numerous sufferers from cancer in the
United Kingdom would, in the hope of ridding themselves of
their fatal malady, try the nostrums on the off-chance
of their being of any service; or upon the rascality of selling,
under the swindling designation of white or blue electricities,
dirty water as a cure for this terrible disease, there can be no
differences of opinion. Mr. Stead is either the associate, the
quack nostrum agent in advance, the journalist tout—or, in
plain words, a "bonnet" for the meanest gang of swindlers
that have ever disgraced even the annals of quackery, or he is
a malignant and outrageously traduced man.

WHEAT PHOSPHATES Nourish Brain and Frame, Form
Bone, Teeth and Muscle, and Enrich the Blood.

FRAME FOOD DIET

Is the only Food
which contains the
WHEAT PHOSPHATES extracted from Wheat Bran, and is
therefore the most NOURISHING food in the WORLD.

For **INFANTS**: Developing Bones, Muscles, Teeth, Brain;
For **INVALIDS**: Restorative and Invigorating; retained by the
weakest stomach when all other food is refused.

For **ADULTS**: A Delicious Breakfast and Supper Dish;
Vitalises the brain and all the functions of the body.

1-lb. Sample in HANDSOME ENAMELLED Box sent free
on receipt of 8d. to cover postage (mention this Paper)

Sold by Grocers, Chemists, &c., in tins, 1 lb. at 1s., 4 lbs. at 8s. 9d., or
sent carriage paid by

FRAME FOOD CO., LTD., LOMBARD ROAD, BATTERSEA, LONDON, S.W.

PURE **NG & SF** PURE
YEAST **Mark** YEAST

Use 4 ozs. to 280 lbs. Flour, second turn in winter.

For doughing direct, and other methods of working, address—

W. HEPWORTH, Harwich, Essex.

Most powerful Yeast known.

SUPERIOR FLAVOUR. LONGEST KEEPING.

Highest Awards, Healtheries, London, 1884.
LONDON, 1893 (this Year).

LARGEST YEAST WORKS IN THE WORLD.

Chafed Skin, Piles, Scalds, Chilblains, Chapped Hands, Neuralgic, and Rheumatic
Pains, Sore Eyes, Ear-ache, Cuts, Sunburn, Insect Bites or Stings, Throat Colds,
and Skin Ailments quickly relieved by use of

CALVERT'S CARBOLIC OINTMENT,

Large Pots, 13½d. each, with full Instructions.

Court Circular says: "We cannot too highly recommend Calvert's
Ointment. It is the best general Ointment with which we are
familiar, and ought to be a stock remedy in every household."

Private report from Limassol Cyprus: "I have never found any
thing to come up to it for neuralgic and 'Rheumatic Pains.'"

Samples sent Free by Post on receipt of value.

F. C. CALVERT & CO., MANCHESTER.
Awarded 60 Gold and Silver Medals and Diplomas.

We have proof upon proof of the accuracy of every statement
which we have made in relation to the Mattei Quack Cancer
Cure swindles. We have evidences of victims who, deceived by
Stead's lies, have even, though pressed by poverty, denied them-
selves the necessities of life in order to pay into the hands of the
swindlers running the quackeries, 2s. or 3s. 9d. for 1½ to 3 ounces
of dirty water. Worse than this, we have evidence of victims of
this gang, whose disease two years ago would have been
amenable to treatment and probable cure, but who have fallen
into the hands of Mr. Stead's associates, and are now at the
point of death. These are not charges to be dismissed lightly,
and Mr. Stead owes it to his own reputation, if he has a shred
of regard for it, to vindicate himself.

In the light of our exposures, of this most nauseous exponent
of modern hypocrisy, the following facts are of interest. A
gentleman in the North of England wrote to Stead calling his
attention to the exposures of Stead in preceding articles that have
appeared in FOOD AND SANITATION. This gentleman writes:—"I
enclose a copy of a letter received from Mr. Stead's manager.
Of course such a way of evading the difficulty will not do for
me. Nothing less than a full and complete refutation of the
charges will clear Mr. Stead in my estimation, or enable me to
feel justified in supporting his publications as I have always done
in the past." The copy sent referred to, is as follows:—

Review of Reviews,

November 29th, 1893.

DEAR SIR,—The articles have been forwarded to him, and if he
should think it worth while, they may be replied to later on, but
his usual policy is to take no notice of such attacks, with which,
by the way, he is pretty familiar.

I am, yours truly,

EDWIN H. STOUT, Manager.

Mr. Stead, according to his factotum, Mr. Stout, seems to us to be very much in the position which Essex occupied through a certain memorable Irish campaign, and Queen Elizabeth's remark to the laggard general would appear to be equally applicable to the editor of *Fagin's Miscellany*. The virgin Queen, losing patience over the numerous excuses advanced by Essex, reminded him that he was unable to march in summer, when it was dry, on account of the heat; when it was wet, on account of the state of the roads; or in winter on account of the snow, and asked if anything in the world could make him move. We pointed out sixteen months ago that Mr. Stead owed some explanation to the public. No notice was then taken of our exposure—we presume, because it was couched in language of studied moderation. It has been necessary, therefore, that we should adopt a sterner tone. It is gratifying, however, to find that correspondence of the following character is, in consequence of our exposures, being addressed to Stead at the *Review of Reviews* offices. A provincial newspaper proprietor wrote to Stead:—

December 6th, 1893.

DEAR SIR,—When I subscribed for one share in the "Daily Paper, Limited," I was not aware that the *Daily Paper* would be started for the purpose of puffing notorious quacks and imposters, such as the promoters of Count Mattei's remedies are known to be, and I must, therefore, ask you to be good enough to return the amount paid, £1 6s., by return of post.

Yours faithfully, W. T. E.

W. T. Stead, Esq.

[COPY.]

Review of Reviews,
Edited by W. T. Stead.
December 7th, 1893.

Telegrams:
Vatican, London:

SIR,—I presume if the manager of the Mattei business in Pall Mall was to submit an advertisement to you in the same words as those used in his advertisement in the *Daily Paper*, you would take it. Personally, I see no reason why you should not, but if you object to such advertisements you are at liberty to have your subscription refunded, but this cannot be done until December 31st. It would take some time to hunt for your coupon.

Yours truly,

EDWIN H. STOUT, Manager.

We refrain from commenting upon the artful puff as to the time it would take to hunt for the coupon, but we suspect the coupon could be found within the space of five minutes, considering that the number of people who have been duped into entrusting £1 6s. each to Mr. W. T. Stead is so very limited. To this letter the gentleman sent the following reply:—

December 11th.

DEAR SIR,—In reply to your favour of the 7th, may I point out that the subject of my previous letter was not an advertisement in my paper, but one in the *Daily Paper*. I am happy to say that I have no necessity, in order to obtain advertisements, to decorate my scale of charges with pious references to godliness and truth. Of course, I am aware that theory and practice are two different things, and you may not care to be reminded of the following extracts from an article entitled "Advertising as a Fine Art," by W. T. Stead in the sample issue of the *Daily Paper*. "There are few things more objectionable than advertisements palmed off as if they were news. All advertisements ought to be marked and not mixed up with the news, but put where people will know where to find them. In addition to having advertisements interesting, they ought to be honest. I hope that the *Daily Paper* will never publish an advertisement which would be calculated to injure, to mislead, or to defraud the public." "I have no wish to make my paper an advertising board for swindlers, and I hope that I shall have the co-operation of my readers in making it difficult for these gentry to obtain possession of their neighbours' money."

Mr. Stead's practice in this is strangely at variance with his profession as seen by the particulars we have already given of his share in the Mattei Quack Cancer Cure, and his having recommended the public to go to the offices of the same swindlers to purchase a new drunk cure. The above very straightforward letter brought an answer of a similar shuffling nature, but typical of the *Review of Reviews*, inasmuch as the letter itself contained a puff of the Mattei swindles, and the treatment of eczema.

If there be any man or woman in the country who has one shred of belief in Mr. W. T. Stead, his methods, and his honour, or whatever else he chooses to call it, we commend the facts above given to that person. Anything more shameful to journalism and more outrageously insulting to religion and true morality than the practices of Mr. Stead, which it has been our duty to expose, we are happy to think it would be impossible to find in any portion of the press of this country, other than that engineered by Mr. Stead.

TEA IMPOSTURES.

In the light of recent discoveries at Southampton that tea is adulterated with lead, it seems desirable that some attention should once more be given to this article. The Custom's examination, it was believed, had squelched tea adulteration, but such finds as those at Southampton may well cause grave uneasiness, and lead the public to ask if tea adulteration be really a thing of the past. Our enquiries go to prove that tea sophistication is very largely practiced, despite the vigilance of those concerned with suppressing it. At least, two great proprietary packet tea firms, to our own knowledge, have in use the patent tea restoring machine, which gives to damaged or "gone off" tea the appearance of first-class new tea. Whether the use of this recent invention explains the discovery of lead in tea at Southampton, or the process of "faking" is harmless, is a matter that ought to be enquired into, inasmuch as lead is a very dangerous poison, and its presence in so many samples may well cause grave public alarm. Popular as is "the cup that cheers, but does not inebriate," tea-drinking will quickly be shrunk from in horror if its devotees have to risk lead poisoning in their favourite beverage. Enough sins are alleged against tea without this of lead contamination. For example, Dr. J. Murray Gibbes, of Australia, affirms that tea excites the nerves, and that as women drink more tea than men, consequently their nerves get more excited. Nerve excitement causes a feverish rush for openings and professions for women; these entail mental labour. Increase of mental development in women can only take place at the expense of their physique. "Therfore," Dr. Gibbes concludes, "in two generations or so both men and women will be toothless!" The abuse of tea, as of other stimulants, carries with it a train of disorders. Doubtless Dr. Gibbes exaggerates, but we shall be curious to see the further results of the Southampton investigations.

ASSAULT IN THE TAKING OF SAMPLES FOR ANALYSIS.

At Liverpool City Police-court, on December 13th, before Mr. Stewart, stipendiary magistrate, a charge of assaulting a girl named Martha Vernon was preferred against Edward Roberts, manager of a shop at 41, Sutcliffe-street, for Messrs. Askin and Pierce, grocers, 110, Boaler-street. Mr. Pierce prosecuted on behalf of the Health Committee of the Corporation, and Mr. Rudd defended. The girl Vernon was on the 8th inst. employed by Inspector Baker to purchase some "shilling butter" and some coffee for the purpose of analysis, at the shop kept by the defendant. She had been served with half a pound of "shilling butter," and was waiting for the coffee, when a man came and told the defendant that "Inspector Baker was about with a girl getting samples." The defendant at once told the assistant to get back the butter as it was not labelled margarine. The girl refused to give it up, whereupon the defendant ran round the counter and, seizing the girl by the wrist, forced her to give up her purchase. The girl said that she was much hurt, and felt the pain for a couple of days afterwards. On being informed of what had occurred, Inspector Baker asked the defendant why he had assaulted the girl, telling him that he would be summoned for the offence. He replied, "She would not give it back, and I thought I had a right to take it, as she had not paid for it." This was practically the defence set up, Mr. Rudd adding that no actual violence was used, the defendant simply taking the margarine from under the girl's arm. The Stipendiary said he was satisfied an assault had been committed, and under the circumstances he should impose a penalty of 40s. and costs.

CONVICTIONS FOR SUNDAY TRADING.

At Dewsbury Petty Sessions, on the 8th inst., Mr. Benjamin Moorhouse, grocer, Millbridge, and Mr. Charles Barber, grocer, Littletown, were summoned for unlawfully exercising their trade as grocers on the Sabbath. The police sent boys to purchase articles at defendants' shops on the Sabbath, and they were served. After hearing the evidence, the Bench said defendants had broken the law, and they would be compelled to convict. In each case a fine of 1s. and costs was imposed.

GRIMBLE'S PURE VINEGAR

Guaranteed BREWED and free from ANY ADDED ACIDS.

GRIMBLE & Co., Limited, Cumberland Market, London, N.W.

IS BAKING POWDER AN ARTICLE OF FOOD ?

JAMES v. SUPERINTENDENT JONES' APPEAL.

The long pending appeal in this case came before Mr. Justice Hawkins and Mr. Justice Lawrence on December 18th. Our readers will remember that the prosecution was instituted under the direction of the Glamorganshire County Council by Superintendent Evan Jones, Pontypridd, on a purchase of the "Excelsior" baking powder at Pontypridd, near Cardiff. The information was under section 3 of the Adulteration Act of 1875—"No person shall mix or powder any article of food with any ingredient so as to render it injurious to health." The charge was selling a baking powder mixed with alum. The case was this. On December 10th, 1892, the appellant sold to respondent a packet of baking powder weighing about 1oz. for the price of 1d. It was composed of certain ingredients—(1) bicarbonate of soda, 20 per cent.; (2) alum, 40 per cent.; (3) ground rice, 40 per cent. The baking powder called "Excelsior," composed of these ingredients, has been sold for many years, and is used exclusively in the process of making bread, cakes, and pastry. It is not necessary to use alum in baking powder. Other acids which are not injurious to health are largely used in commerce for the purpose. The acid used in the best-known baking powder is tartaric acid, which is not injurious to health, but this acid is sold at a much higher price than alum. The ground rice is added to the bicarbonate of soda and the alum for the purpose of preserving the compound from injury by damp. It was stated that 3lb. of flour kneaded with water and a sufficient quantity of the baking powder will yield about 4lb. of bread. For this purpose about 360 grains of the baking powder would be used, of which four-tenths would be alum. The reaction or mutual action between the alum and the bicarbonate of soda produces hydrate of alumina, in which form it is eaten in the bread made with the baking powder. After hearing the evidence of experts, the Court found that the appellant unlawfully sold to the respondent a baking powder, which is an article used for food within the meaning of the Act, mixed with alum, which is injurious to health. The magistrate convicted, and the sessions affirmed the conviction, but a case was stated upon these points of law:—(1) Whether a baking powder is an article of food or an article used for food within the Act; (2) whether, if baking powder is an article of food or used for food, there is evidence to support the finding that the appellant sold the same to the respondent mixed with an ingredient—i.e., alum—injurious to health. The question in substance was whether the Magistrates were right in holding that the baking powder was an article of food or an article used for food within the meaning of the Sale of Food and Drugs' Act, 38 and 39 Vict., c. 63, and, if so, whether there was evidence that the appellant sold the same mixed with an ingredient injurious to health, upon which the seller appealed.

Sir R. Webster (with Mr. Brynmor Jones, Q.C., and Mr. Macmorran) appeared on his behalf and argued that the baking powder is not an article of food, but rather an ingredient or mixture used in the preparation of an article of food, that is, bread or pastry. Here it was not the bread, but the baking powder, which was sold by the appellant, and surely the powder is not an article of food.

Mr. Finlay, Q.C. (with Mr. Rhys Williams), appeared for the respondent and urged that the powder was an article of food, and one of its elements or ingredients was alum, which was admitted to be injurious to health. It was as much an article of food as pepper or salt, which were condiments, but were not the less articles of food. Salt was one ingredient in the bread, and the baking powder another.

Sir R. Webster, in reply, said the Act only applied to articles used as or for food, and salt was so used, but the baking powder was not. And as to alum, he said it had been doubted by Mr. Bulwer, the Recorder of Cambridge, whether alum, even if deleterious to health, could be regarded as an article of food ("Warren v. Phillips," 44 *Justice of the Peace* and 68 *Law Times Reports*); and the baking powder or the alum, used in proper proportions, would not be in-

jurious to health. And even if it were true that the powder was mixed with and made part of the bread, the bread would be the article of food adulterated. But the information was not against the baker; it was against the seller of the baking powder, and that was not *per se* an article of food. In this case, then, what was the "article of food" sold by the defendant which was adulterated?

The Court said that as it was a matter of general interest they would take time to consider their judgment.

MARGARINE ACT PROSECUTIONS.

At Hatfield, on December 11th, John Gregory, of Hatfield, was charged with selling one pound of margarine for pure butter, and further with selling one pound of margarine which was not wrapped in a wrapper with margarine printed on it. Defendant pleaded guilty, but said it was through ignorance of the law, and not with intent to defraud. Mr. Thomas Johnson, Inspector of Weights and Measures, said that he sent his assistant to Mr. Gregory's shop at Hatfield, on November 17th, for some butter. He afterwards came out with it, and witness then went in and told defendant that the butter was bought for the purpose of being analysed. Defendant then said that it was margarine. Witness said it was too late to tell him that after the purchase had been made. He took it to the Analyst (Mr. A. E. Ekins, St. Albans), and it was found to contain 25 per cent. of butter and 75 per cent. of margarine. Witness, in answer to a question, said he gave 1s. for it. Defendant said he called witness's attention to the fact that there was a label on the block where he had the butter from. Witness said that he did not see the label, but when he asked for it defendant fetched it from behind the counter. John Lewis said he was assistant to Mr. T. Johnson. On November 17th he went to defendant's shop and asked for some butter. He asked how he priced it, and defendant said "sixteen pence, fourteen pence, and a shilling." Witness said he would take a pound of the shilling butter. He then went out to Mr. Johnson. Defendant: When you asked me the price of butter I told you eighteen pence. Witness: No. Witness continuing, said he saw defendant sell some margarine to another person, and that was not in a margarine wrapper. The chairman said that the Bench had considered the case, and as the defendant had broken the law, he would be fined 40s., and 9s. 6d. costs, in the first case, and the costs, 9s. 6d., in the second, making £2 19s. in all.

MARGARINE AS BUTTER.

At Hull Police-court, on December 12th, Thomas Boulton, grocer, 97, Bean-street, was summoned for having sold half a pound of margarine as butter, contrary to the Food and Drugs' Act, 1878; and also for having sold the same in a packet not properly branded or marked in accordance with the Margarine Act, 1887, which should have had the word "margarine" marked with letters not less than three-quarters of an inch in size. Mr. Duncan, from the Town Clerk's Department, prosecuted, and called Inspector Baldock, who said that on November 9 he asked defendant's wife for half a pound of butter, for which he paid 6d. Witness told her what his intentions were, and she was willing that he should divide the samples in the usual way. Mr. James Baynes, the Borough Analyst, had since certified one of the samples to be margarine. The Inspector afterwards saw defendant, who said he was ill in bed at the time and his wife sold it unintentionally. Defendant, in defence, stated that he had only been in business three months, and acted quite in ignorance. The Stipendiary Magistrate explained to defendant that he had rendered himself liable to a penalty of £20 in each case, and on the first summons he was fined 20s. and costs, whilst in the second, judgment was respite on payment of costs.

At the Liverpool City Police-court, on December 13th, Frank Smythe, of 56, Athol-street, was fined 10s. and costs on each of three informations for exposing for sale three lumps of margarine which were not labelled as such. Inspector Baker proved the case. The defendant said that what had occurred was an accident, and he had not intended to defraud anyone. The Stipendiary Magistrate replied that it was not necessary to prove intention to defraud; the margarine must be labelled.

HORLICK'S
MALTED
For Infants
and Invalids.
MILK
CONTAINS PURE MILK, WHEAT AND BARLEY MALT.
NUTRITIOUS, DIGESTIBLE. GUARANTEED ABSOLUTELY PURE.
OF ALL CHEMISTS AND STORES.
SAMPLE FREE. 39, SNOW HILL, E.C.

THE MATTEI CANCER CURE SWINDLES.

Medical men and others who know of persons who have been victimized by the Mattei Cancer Cure Swindles, will greatly oblige by communicating with

E.K., c/o FOOD & SANITATION,
183, Strand, London, W.C.

MEAT EXTRACT REVELATIONS.—No. V.

(Copyright.)

Continued from page 389.

In a series of analyses and experiments made in 1891 by Mr. R. H. Chittenden, Professor of Physiological Chemistry at Yale University, the results of which were communicated to the Philadelphia County Medical Association, on May 13th of the same year, Mr. Chittenden gave the following as the percentage composition of Liebig's Extract of Beef, Valentine's Meat Juice, and Bovinine. The figures were:—

	Liebig's Ext. of Beef.	Valentine's Meat Juice.	Bovinine.
	2 ozs. cost 1/2d.	2 ozs. cost 3/-	2 ozs. cost 11d.
Water (at 110 c.) ..	20.06	60.31	81.09
Solid matter ..	79.94	39.69	18.91
Inorganic constituents ..	24.04	11.30	1.02
Phosphoric acid P ² O ⁵ ..	9.13	4.00	0.03
Fat (ether extractives) ..	0.91	0.78	1.49
Total nitrogen ..	9.52	2.68	2.43
Soluble albumen coagulable by heat ..	0.06	0.55	13.98
Total proteid matter available as nutriment ..	0.06	0.55	13.98
Nutritive value as compared with fresh lean beef (lean beef=100)	0.30	2.80	72.40

These analyses were, as regards Liebig's and Valentine's Meat Juice, practically confirmed by results published by Mr. Jesse B. Battershall, Ph.D., F.C.S., chemist, United States Laboratory, New York. Mr. Battershall in "FOOD ADULTERATION," p. 256, gives the following analyses:—

	Liebig's Extract.	Valentine's Meat Juice.
Water ..	18.27	50.67
Organic substance ..	58.40	29.41
Ash ..	23.25	11.52
Soluble albumen ..	0.05	—
Alcoholic extract ..	44.11	—
Phosphoric acid ..	7.83	3.76
Potassa ..	10.18	5.11

Readers of FOOD AND SANITATION do not need to be told that we accept nothing on hearsay or upon testimonials. We believe that for the public safety every food, every drug, and, above all, every patent preparation, ought to be regularly subjected to analysis, as we are now subjecting every patent food offered to the medical profession and the public. The results, be they favourable or the reverse, ought to be honestly stated, the more so as few medical men have the appliances, the time, and the training necessary to enable them to make individual investigations. We shall, therefore, in examining Mr. Chittenden's and Mr. Battershall's analyses, deal with them in a plain, matter-of-fact manner, and entirely upon their merits, however unexpected be the results and astonishing the conclusions. Divesting thus our minds of cant, we have first to note that Mr. Chittenden gives the soluble albumen as 0.06, whilst Mr. Battershall finds 0.05 per cent. in Liebig's Extract. In Valentine's Meat Juice Mr. Chittenden finds 0.55, i.e., a little over one-half per cent. On the assumption, therefore, that Valentine's Meat Juice is worth as a nutrient 3/-, Bovinine (containing 13.98 per cent. of available nutrient matter) is worth £3 16s. 3d. per bottle of two ounces, although Bovinine sells at 2/9 per six ounces (=11d. for two ounces), as against 3/- charged for two ounces of Valentine's Meat Juice. A similar calculation with regard to Liebig's Extract discloses the fact, that if Liebig's be worth 1/2d for two ounces, Bovinine is worth, on Mr. Chittenden's analysis, the sum of £14 1s. 6d. per two ounces.

So much for Mr. Chittenden and Mr. Battershall. Our analyses of both Liebig's and Valentine's preparations show that they are more valuable in nutrients than the analyses above given disclose, and that the results of Mr. Chittenden and Mr. Battershall require correction; the gelatine and albumen in Liebig's being 1.35 per cent., and in Valentine's 0.93 per cent. For the purposes of an accurate comparison, we give our own full analysis of the three preparations in a comparative form:—

	Liebig's Extract of Meat.	Valentine's Meat Juice.	Bovinine.
	2 ozs. 1/2d.	2 ozs. 3/-	2 ozs. 11d.
Water ..	16.87	55.24	Water & Alcohol } 78.42
Fat (Ether Extract) ..	8.04	4.80	0.09
Gelatine and Albuminoids ..	1.85	0.93	13.32
Peptones ..	8.20	1.55	0.00
Creatine and Meat Extractives (almost non-nutritious)	47.32	18.27	0.55

Salt ..	5.08	2.62	1.04
Mineral Matters, Salts of Flesh, Phosphates, etc.	17.46	8.51	0.57
Non-Nitrogenous Extractives	0.66	8.08	6.01
	100.00	100.00	100.0

Calculated comparatively on our own analyses, the albuminoid values work out as follows, taking Valentine's Meat Juice as the basis for the calculations:—Valentine's, containing 0.93 albuminoids, costs 3s.; Liebig's, with 1.35, costs 1s. 2½d.; and Bovinine, with 13.32, costs 11d. If, therefore, Valentine's be worth 3s., Liebig's is worth 4s. 4d. instead of 1s. 2½d., and Bovinine is worth 43s. To avoid the possibility of error, we have had duplicate analyses made of Bovinine. The second analysis gave the following results:—

BOVININE.

Water and Alcohol ..	80.70
Fat (Ether Extract) ..	1.21
Gelatine and Albumen ..	12.92
Peptone ..	0.62
Creatine and Meat Extractives ..	0.21
Salt ..	0.78
Other Mineral Matters ..	0.08
Non-Nitrogenous Extractives ..	3.48

100.00

It will be noticed that there is a slight difference in the figures, but this is to be expected in any food preparation, which must vary to some extent. The lesson to be learnt from these analyses, and from the others already published in this series of articles, is, that the system of manufacture of patent food preparations needs revolutionising, and that no medical man can afford to neglect the study of the real value of the meat extracts, etc., he prescribes. At one time the Liebig and Valentine preparations were undoubtedly the best that were placed at the service of the physician. Instead of advancing with the progress of science, the makers have been content to rest where they were when the science of foods was in its infancy. Tradition has invested them with a halo of testimony, no doubt honest enough in its time, and with respect to some of the most largely prescribed patent foods, that tradition has been handed from teacher to teacher, from father to son, and from school to school, without anyone being iconoclastic enough to examine into its *bona-fides*. It is dangerous for the medical man, above all men, to take anything on trust. Dr. W. M. Grailly Hewitt, in an address to the British Medical Association, emphasised that danger in weighty words, saying:—

"For the last six or seven years I have tested, by carefully inquiring into the past history of patients mostly suffering from some uterine or ovarian disease, or some affliction incidental to child-bed, and these conclusions have stood the test of this long-extended inquiry. I have to state the important conclusion that a continuous insufficiency of food, or what may be called 'a chronic starvation,' more or less intense in different cases, was found to have existed almost universally. Consequently, I have naturally been led to consider chronic starvation as a most important factor in disease."

Experiments have proved that an animal fed upon Liebig's extract of beef alone, will succumb more readily than a like animal entirely deprived of food. The claims advanced, therefore, in favour of preparations of Liebig's Extract of Beef, Meat Juices, and Beef Essences that they represent some 30 to 40 times their weight of lean beef is absurd, inasmuch as such preparations are practically devoid of nutritive value, and the waste creatine and extractives (at times half the bulk of the preparation), although of some value as stimulants, have the disadvantage that their use in many diseases is positively dangerous. It is time, therefore, that such preparations were relegated to the kitchen for use as flavouring agents—with which no one would quarrel—and that their makers ceased to represent them to the public as foods. What, for example, are we to think of the following announcement accompanying Brand's Essence of Beef:—

BRAND & CO.'S ESSENCE OF BEEF.

"This essence consists of the juice of the finest beef, extracted by a gentle heat, without the addition of water or any other substance whatever, by a process first discovered by ourselves in conjunction with a celebrated physician.

"In cases of extreme exhaustion or urgent danger, a tea-spoonful may be administered as often as the patient can take it, in less urgent cases it may be taken as required with a small piece of bread and a little wine."

In the light of the following analysis?

	Brand's Essence of Beef, cost 1s. 2d.
Water ..	91.23
Fat (Ether Extract) ..	0.18
Gelatine and Albuminoids ..	1.25
Peptones ..	2.54
Creatine and Meat Extractives	almost non-nutritious
Salt ..	0.45
Other Mineral Matters ..	0.39
Non-nitrogenous Extractives ..	None.
	100.00

or of the assertions *re* Liebig's Extract—that "it makes the most nourishing of beef tea." Again, if we take the nutrient values of the three preparations, as compared with fresh lean beef—reckoning lean beef as equalling 100·00

Liebig's equals only	0·30
Valentine's " "	2·80
whilst Bovinine equals	72·40

According to Chittenden's analyses, Valentine's would be worth nine and one-third times as much as Liebig's, whilst Bovinine would be worth two hundred and forty times as much as Liebig's Extract, and nearly twenty-six times as much as Valentine's Meat Juice. It is apparently no use asking on what basis the price of patent foods is regulated, seeing that Bovinine—shown by Chittenden to be worth, compared with lean beef, two hundred and forty times as much as Liebig's Extract—sells at 11d. per two ounces, whilst Liebig sells at 1/2½ for the same quantity; that Bovinine is worth twenty-six times as much as Valentine's, but is only charged 11d., against Valentine's 3/-. The numerous correspondents who have enquired of us as to the value of Bovinine, will be able from the analyses above given to draw their own conclusions. To us, our examination appears to justify the statements of the manufacturers, which have found corroboration by our contemporary, the *British Medical Journal*, as follows:—

"Bovinine is now thoroughly well known in the profession as an excellent preparation of the juice of lean uncooked beef in which the nutritious albuminoid elements are preserved, in addition to the meat, salts, and extracted matter." . . . "It has from the first (1878) been introduced strictly to the profession, and is largely used in cases of mal-nutrition or mal-assimilation, convalescence, in diarrhoeic and dysenteric conditions, and for other cognate purposes." and without pledging ourselves to the extraordinary value given to it by Mr. Chittenden's analyses, but confining ourselves to our own comparative values, our examination shows it to be a valuable preparation. Used at Grantham, in a recent case of extreme exhaustion from excessive blood-loss following labour, the doctor who administered it reported—"The woman was in such a critical state that it appeared impossible to save her life by any means but transfusion. To perform this operation successfully, suitable apparatus is required, and as this was not at hand I determined to put Bovinine to the test, and directed that it should be given in small doses very frequently. It was difficult at first to get the patient to swallow, but by perseverance a small quantity was swallowed, and the patient gaining strength, more was gradually ingested. The result was simply marvellous for, in a few hours the poor woman was literally rescued from what appeared certain death. I have no hesitation in saying that this valuable nutriment which was so readily taken up into the system saved this woman's life." It has also been used for local nutrition in cases of ulcer, 145 of which were indolent, 75 Syphilitic, 60 varicose, and 65 Tuberculous. Of these 335 cases but 17 failed, showing 95 per cent. successfully treated.

(To be continued).

THE ETHICS OF HONOURABLE TRADING.

CHAMPION & Co., LTD., v.
THE BIRMINGHAM BREWERY Co., LTD.

Happily for the dignity of English trade, cases like that tried in the High Court of Justice on December 15th are scarce. But the case raises a point of the gravest importance to all manufacturers, and one which they ought to seriously consider. If it be the law that any firm accused of adulteration may legally be treated as the Birmingham Vinegar Company treated Messrs. Champion and Co., then the sooner such law is changed the better. The poet said wisely who wrote—

"I hate the man who builds his fame
On the ruins of another's name."

And whatever the law may say as to the liberty of the Birmingham Vinegar Company, to use some exceedingly foolish and unwarranted comments from the *Grocer*, and disseminate such to Messrs. Champion's customers, the morality of the procedure is not affected by the dictum of the Court of Queen's Bench. The rough and ready principles by which business is conducted, and which fortunately still govern the conduct of even the keenest of trade competitors will condemn in the sternest manner such liberty as the grossest of licence. We know Messrs. Champion's Vinegar well, as we also know that of the Birmingham Vinegar Company, and of our own knowledge, in the face of this unjustifiable attempt to lead grocers to believe that there is anything suspicious about Messrs. Champion's Vinegar, we think, in justice to the firm, so unfairly attacked by a competitor, that it behoves us to say, that examination of Champion's Vinegar made for many months past by the ablest Public Analysts—the few who do understand vinegar analysis—not only show, to our personal knowledge that Messrs. Champion's Vinegar is a pure vinegar, but that it is one of the very few vinegars which grocers may buy with confidence, and the public use, with the knowledge that it stands in

the front rank of pure, wholesome, and healthful vinegars, and the Birmingham Vinegar Company, knowing this—which they must do—were exceedingly ill-advised in the action they took in publishing the stupid and unwarranted paragraphs in question, reflecting upon a trade competitor. Assuming that such a course were to be adopted by the Birmingham Vinegar Company's rivals in trade, our columns show prosecutions of that Company for adulteration which, were Messrs. Champion & Co. to choose, they would be at liberty to use with equally damaging effect against the Birmingham Vinegar Company. To act as the Birmingham Vinegar Company have done, is to play with a two-edged sword, and in the opinion of all who think that trade should be conducted with dignity, scrupulous consideration and fairness, whatever the Lord Chief Justice or Mr. Justice Collins may say as to the legality of the procedure, the practice is one more honoured in the breach than in the observance.

The following is the case as reported:—

On August 25th last there appeared in the *Grocers' Journal* a paragraph, headed "Messrs. Champion's Vinegar in Court," stating that a charge had been made against a grocer under the Adulteration Act for selling vinegar adulterated, and that the dealer had purchased it from another, who had received it from Messrs. Champion, and that a letter from them was read denying the truth of the charge as to their vinegar, but that a fine was imposed on the retail dealer, the Bench, however, observing that it was most unfair that the disgrace should be visited on him; that on August 26th another similar paragraph appeared in the *Grocer*; and that the Birmingham Vinegar Brewery Company, Ltd., immediately after the publication of the paragraphs, with the view of inducing the plaintiffs' customers and others to believe that their vinegar was adulterated, caused the paragraphs to be reprinted on slips of paper and circulated them extensively, and furnished their travellers, servants, and agents with copies, and directed them to leave them with the plaintiffs' customers, and to state that the plaintiffs' vinegar was adulterated, and that persons retailing it would expose themselves to prosecution; and that the defendants' agents and travellers did so. The plaintiffs further complained that the defendants caused to be printed and published of the plaintiffs a letter in the *Grocers' Journal*, headed "The Vinegar Question," stating that the excuse which had been urged by Messrs. Champion was "absolutely trivial and ridiculous," and that any competent manufacturer would know his own production, &c., and that "Messrs. Champion, being either unable or unwilling to protect their customers in a proper manner, attempted to 'bounce' the Court and the public by making extraordinary statements as to their output, and which it was impossible for them to substantiate;" meaning, as the plaintiffs alleged, that their vinegar was adulterated, and that they made idle and ridiculous excuses for it. And, further, that the defendants maliciously caused the letter to be reprinted and circulated among the plaintiffs' customers and others, and that by reason of these republications the plaintiffs had been prejudiced in their business and the reputation of their vinegar for purity had been affected, and they prayed, as well as damages, an injunction restraining the defendants from circulating these republications; and particulars had been given of the names of 62 persons to whom the republications had been given. There had not as yet been a plea delivered, but while it was asserted in the affidavits that the analyst had been wrong, it was not suggested that the paragraphs as reports were untrue, or that it was intended to continue the publications, and the contrary was sworn. An order had been made at Judges' Chambers to restrain further circulation of the publications complained of, against which the defendants now appealed.

Dr. Blake Odgers, Q.C. (with Mr. R. Younger), appeared for the defendants in support of their appeal.

Sir Edward Clarke, Q.C. (with Mr. Coward), appeared for the plaintiffs in support of the order for an injunction.

Their Lordships, having conferred, came to the conclusion that the injunction must be dissolved.

Lord Coleridge, in giving judgment, said the law had been settled by a decision of the Court of Appeal in a case of the highest authority—"Bonnard v. Perryman." And the law had been settled to be that an injunction ought not to be granted in such case unless the Court were absolutely satisfied that a wrong was being done, and that it is not so if a jury might, on any ground reasonably suggested, find that a wrong was not done. By that decision the Courts were bound, and the more so, since the jurisdiction to restrain the publication of libels had only been exercised recently. It was a jurisdiction of a delicate nature, and not to be exercised but in the clearest cases. Now, the occasions on which these alleged libels were issued were all occasions on which, unless abused, privilege might exist. In the case of "Stevens v. Sampson," which was quite different from this, there was evidence of malice and that the occasion had been abused. It was very well-established law that the occasion must not be abused, and the jury found there that it had been abused. The judgment, therefore, in the present case was quite consistent with that case.

Mr. Justice Collins was of the same opinion. Appeal allowed, and injunction dissolved.

NOTICE TO READERS.

Back numbers of this Journal are now very scarce, and can only be supplied in future at 3d. per copy. Vols. 1 and 2 including index 20s. each. Index separate 1s. each.

GROCCERS AND THE PHARMACEUTICAL SOCIETY.

DR. ARTHUR PEARSON LUFF AGAIN GIVES EXPERT EVIDENCE.

We have times over exposed the brazen, unjustifiable selfishness of the crusade the Pharmaceutical Society is indulging in against the sale of patent medicines by grocers, not because we have any belief in such nostrums, for, on the contrary, we would dearly love to see each of the Beecham's, St. Jacob's Oil, and the like, subjected to a guinea stamp per box or bottle, but because we detest cant, and amongst the very worst specimens of it we must reckon the pleas of the Pharmaceutical Society in its attacks upon grocers. The Pharmaceutical Society knows thoroughly well that, with few exceptions, the patent medicines are the most barefaced swindles; it knows further that the concoctors of these swindles are mostly qualified chemists, some of whom may be members of the Pharmaceutical Society itself; it knows, also, that the nostrums are just as dangerous when sold by a qualified chemist as by a grocer, and it finally knows—and here the cant and hypocrisy reveal themselves in their most nauseating character—that professions of regard for the safety of the public are utter humbug, the real objects being to “exploit” the grocer under untrue pleas of the public safety, and to secure the large profit accruing from the sale of the rubbishy nostrums for the chemist alone.

If the Pharmaceutical Society were doing anything to open the eyes of the public to patent medicine swindles, or to suppress adulteration in drugs, then something might be said to justify its action; but this attempt to “corner” the sale of Mattei Cancer Cure swindles of dirty water, at 3s. 9d. for three ounces, or pills sold at 3s. per ounce, the prime cost of which is 5d. per lb., and to secure a monopoly of the sale of such quackeries to the chemists, is bringing the chemist in a sinister light before thinking persons. Of course we shall be told that the Pharmaceutical Society only wish to prevent the sale of medicines containing poisons, but this crusade against grocers has had a different effect, and one that we know was expected. It was intended to so worry, harass, and bewilder the grocers that they would give up the sale of patent medicines altogether, and it has in scores of cases succeeded in doing this. Those who remember the Alum in Baking Powder appeal reported in FOOD AND SANITATION, April 22nd, page 86, will smile at the further expert evidence of Dr. Arthur Pearson Luff disclosed in the following case:—

At the Weston-super-Mare County Court, on December 12th, the Council of the Pharmaceutical Society of Great Britain (by Richard Bremridge, the registrar of the said society, by the authority of the said Council) sued Wyndham R. Burston, of the West of England Co-operative Stores, High-street, Weston-super-Mare. Plaintiffs claimed £5 for amount of penalty incurred by the defendant on May 10th, 1893, in keeping open shop for the retailing, dispensing, or compounding of poison, to wit, a preparation of aconite called “Henry's Nervine,” contrary to the provisions of the Pharmacy Act, 1868 (31 and 32 Vic., cap. 12). Plaintiffs also claimed £5 penalty in respect of an alleged offence on June 22nd, 1893. Mr. T. R. Grey appeared for the plaintiff society, and the defendant was represented by Mr. Bonsey, instructed by Messrs. Neve and Beck, 21, Lime-street, E.C., on behalf of the Patent Medicine Vendors' Defence Association (Limited). Mr. Grey pointed out that the Act under which proceedings were taken was an amendment of the Pharmacy Act, 1852, and regulated the sale of poisons. The preamble of the Act stated that it was expedient for the safety of the public that people keeping open shop for the retailing, dispensing, or compounding of poisons should have a practical knowledge of their business; that they should be duly examined and their names entered on a register. The first section provided that it should be unlawful for any person to keep open shop for the retailing or compounding, &c., of poisons other than pharmaceutical chemists under the meaning of the Act, and under which such chemists should be registered. Section 2 enacted that the several articles enumerated in Schedule A should be deemed poisons, and his honour would notice that the fifth on such schedule was aconite—that would be the poison involved in the present case. Having pointed out the absence of the defendant's name from the printed register of the Pharmaceutical Society, Mr. Grey read Section 15, which provides that any person who shall retail or compound any poison without being qualified to do so should be liable to a fine of £5 for each offence. In this case, on May 10th and June 22nd, purchases were made at defendant's shop of a preparation called “Henry's Nervine.” (The learned gentleman here put in the two bottles, the labels of which bore the words “for onward application only,” one of them being also marked “poison.”) What they had to deal with was, whether the mixtures in the bottles contained a poison named in the schedule of the Act. Mr. Grey then quoted a case, *Pharmaceutical Society v. Piper*, in which it was held that under the Act the prohibited sale of poison was not confined to poisons in a simple state, but extended to the sale of compounds containing poisons mentioned in the schedule of the Act. Arthur Pearson Luff, doctor of medicine, bachelor of science, &c., and Official Analyst to the Home Office, stated that he had considerable experience in the practice of chemistry extending over several years. He had subjected the contents of the bottle No. 1 to a careful analysis. The bottle contained a liquid of a brownish colour and slightly acid. He was of opinion that it contained the poison

of aconitine, which was an alkaloid extracted from a plant called aconite, and popularly known as “monkshood;” it was one of the most poisonous substances known. Mr. Bonsey inquired how Dr. Luff defined poison: there were many lotions and medicines in which the ingredients were poison, so how could he define between medicine and poison? Witness: A poison may be a medicine if used in non-poisonous doses; then it is not a poison at all. Mr. Bonsey: Supposing I had a tonic with strychnine as one of the ingredients, would that be a poison? Witness: That depends upon the quantity and the size of the bottle. Ernest George Eastes, Analyst, and a Fellow of the Institute of Chemistry, in answer to Mr. Grey, stated that he had analysed the contents of bottle No. 2, and found aconite in the same. Mr. Bonsey, in opening the case for the defence, said if he could satisfy his honour that the mixture did not contain aconitine, his client was of course entitled to succeed in his case. Referring to the case of the *Pharmaceutical Society v. Piper*, the learned counsel said, firstly, the Act did not apply to a poison when it was merely an ingredient in a compound; and, secondly, there was no evidence to show that the preparation in question was a poison, but only that one of the ingredients was, in the case alluded to, and the judges had some doubt as to whether they were really right in their decision. He should take the same points as *Piper's* case covered; and these were not altogether frivolous points. It was a difficult Act to construe, and except incidentally and indirectly—as the judges admitted—the Act did not apply to the ingredients at all; they were only referred to in the 17th section. From the evidence which he proposed to call, he thought he would be able to prove that the mixture did not contain any aconitine. Page Woodcock was then called, and examined by Mr. Bonsey, deposed that he was a patent medicine manufacturer carrying on business at Lincoln. The contents of the bottles (produced) were manufactured by him. The mixture did not contain any aconite or aconitine, but it contained veratrin. Cross-examined by Mr. Grey: He was not a chemist. The mixture had been manufactured under his personal supervision for the last twenty-five years; he had succeeded his father in the business four years ago. He knew the nature of aconitine and had had something to do with it. The veratrin had been supplied to him by a most respectable London firm of wholesale druggists. He obtained the veratrin in packets of four ounces at a time, and that quantity lasted him three or four months. Edward Davis deposed that he was an analytical consulting chemist of Liverpool. He had made an analysis of the mixture, and he was quite sure that it did not contain aconitine. He had applied physiological and chemical tests both to the mixture and to veratrin with precisely similar results. His Honour, in summing up, remarked that plaintiffs held that the “Nervine” was a poison, to wit, a preparation of aconite, and therefore were bound by their principles to prosecute. Even if he considered the preparation was not proved to be aconite, but was veratrin, he should certainly not allow any amendment, because—though these prosecutions were of the greatest value, and the Act should be stringently enforced by all who had any power to do so—they could not close their eyes to the fact that the proceedings savoured of a criminal character. He had had before him some extremely interesting evidence from Dr. Luff and Mr. Eastes, both of whom had examined the preparation; from Mr. Davis, the analytical chemist; and also evidence of great importance from the manufacturer, who probably derived considerable profit from the sale of that particular drug. The reason why he considered Mr. Woodcock's evidence of such value was because when one's mind was in the balance between the *ex parte* evidence of one side and the *ex parte* evidence of the other, the fact that the manufacturer came forward and testified that for twenty-five years past he had personally supervised the manufacture of the preparation, and that he had used veratrin—obtained from a respectable firm—as an ingredient, and also fully knew the difference between the two drugs, he could hardly help being influenced by such evidence. When he had the evidence—which he saw no reason to doubt—before him, it threw a light upon the serious question as to whether the plaintiffs had made out their case by the evidence they had called. He was bound to say all the experts had given their evidence—as one would expect persons of such distinction as Dr. Luff or of the experience of Mr. Davis and Mr. Eastes to give—with the greatest fairness, and without any reserve or desire to exaggerate either one way or the other. At the same time, one had to look at their evidence with this reservation, viz., that Dr. Luff at the time of starting his analysis was not hunting for veratrin, and very early in the course of his inquiry felt satisfied that there was none contained in the preparation, and, on the other hand, that Mr. Davis started on the scent of veratrin because it had been suggested to him, and he proceeded, more or less, with the intention of finding it—not as a matter of dishonesty by any means, of course. It appeared from Dr. Luff's evidence that three things had impressed his mind as to the presence of aconite: first, the negative results of the chemical tests as to other alkaloids being contained in the preparation; and, secondly, the two results of his physiological tests. Apart from the remarkable fact which had been weighing his mind, that the hydrochloric test did not answer the discovery of veratrin—and that was a difficulty which he felt—he thought the evidence of Dr. Luff must be read subject to the fact that that gentleman was not looking for veratrin, and the fact that the results of physiological tests both as regards the finding of aconite and veratrin were somewhat similar. It only showed how experience might differ on a matter so difficult as a physiological test case. He should not, as Mr. Grey wished, in fairness, be influenced by the experiments shown in the Court, on account of the difficulty of deciding as to the exact nature and purity of the solution obtained from the sample of “Nervine.” If Dr. Luff had been able to tell him that he had

also experimented on mice with veratria, and that the results were different in degree to the experiments made with aconitine, it would have had a great deal of weight with him; but Dr. Luff admitted that he had not done so, but had only injected mice with aconitine. In view of the similarity between these drugs as shown by the evidence, and the statement by the manufacturer that the ingredient used by him was veratria, he was obliged to come to the conclusion—subject to any very marked failing on the part of Mr. Davis to support the case—that the plaintiffs had failed to make out their case. The experiments went a long way to show that the plaintiffs had not made out their case—the drug might be veratria or it might be aconitine: he was not satisfied which of the two it was; and this it was the duty of the plaintiffs to prove in order to succeed with their action. It might be that veratria was a poison, so that proceedings could be taken under the Act, and possibly when Mr. Bonsey next came before the Court in an action brought against Mr. Woodcock for selling veratria, he would maintain that it was aconitine. (Laughter.) In his verdict for the defendant his Honour granted the maximum allowance of costs, and also leave to appeal if desired.

MR. WILLIAM BROWN AGAIN.

Once more we have to record Mr. Brown's presentation at Court, this time at West London Police-court, on December 7th, two summonses being against Wm. Brown, the Farmers' Direct Supply Association, South-grove, Bow, and one against James Beckwith, in his employ, in respect of the sale of milk which was not of the quality demanded. The purchase was made by Inspector Jones, of the Fulham Vestry, in Reporton-road. He asked for a pint of milk, which Beckwith supplied from a trolley, and paid three halfpence for it. The certificate stated that the sample contained 45 parts of genuine milk, deficient of fat 45, and added water 10 parts. In answer to a question, the Inspector said there was the figure 8 on the trolley, and the word "skim" in smaller letters. In his evidence the Inspector said that after he declared the intention for which the milk was purchased, the defendant Beckwith said it was skim milk. The defence was that Beckwith was sent out to sell skim milk, and the notice of it was given to the public, also that new milk could not be sold at 3d. per quart. Mr. Haden Corser thought sufficient notice was not given, and fined the defendant Brown, who had been convicted a number of times, £20, with 12s. 6d. costs. He ordered Beckwith to pay the costs of the summonses.

WHOSE WAS THE ESSENCE?

Truth says:—

"I hear that about 50,000 tins of essence of beef, which were purchased by the late Government for the use of the forces in Egypt, have been condemned at Malta. What, in the name of common sense, could be the object of purchasing 100,000 tins of the compound, when only 50,000 were required, with the natural result that the surplus stock was kept at Malta until it turned bad?"

THE ALLEGED CHAMPAGNE FRAUDS.

The case of which we reported the first hearing in our issue of December 9th was concluded at Marylebone, on December 15th, when Mr. Joseph Webster, of the Red House Hotel, St. John's-wood, appeared in answer to adjourned summonses charging him with infringing the Merchandise Marks Act, 1887, "by selling champagne, to which a false trade-mark had been affixed—to wit, a label purporting to show that the wine was of the manufacture and was bottled, corked, and capped by Messrs. Perrier-Jouët and Co., of Epernay." Mr. O. Matthews appeared to prosecute, and Mr. Horace Avory defended. Mr. Avory now called evidence to show that Knowlman, the man who bought the champagne, had himself affixed the false labels to it, that he had been the keeper of a disorderly house, and that it had been his practice systematically to defraud persons visiting that house in this way. Mr. de Rutzen said he had not the slightest hesitation in dismissing the summonses. It was a pity that the position of the man Knowlman was not more closely inquired into before this attack was made on the defendant. He ordered that the defendant should receive £10 10s. costs.

We cordially endorse Mr. de Rutzen's remarks. If prosecutions are to be instituted, as this appears to have been, in red hot haste, and without evidence other than that of persons of the most questionable character, no publican could conduct his business with safety. There is unquestionably a vast amount of swindling going on in the champagne, whisky, brandy, and bottled beer trades; but bottlers could readily protect themselves against it if they would take the trouble. Messrs. Perrier-Jouët owe it to themselves and to Mr. Webster to prosecute in this case with the utmost rigour of the law the guilty person.

MORE SEIZURES OF ROTTEN TINNED MEATS.

At the meeting of the City of London Commission of Sewers, on December 19th, Dr. Sedgwick Saunders reported that a seizure of 200 cases of 6lb. tins of mutton exposed for sale had been made, and the offenders would be prosecuted. We drew attention a few weeks ago to the existence of a gang of swindlers, who make a business of dealing in rotten tinned meats. Apart from the grave dangers to "public health, the existence of this gang in active operation threatens serious injury to a great, and to the poor, a very valuable food industry; and the produce Section of the London Chamber of Commerce ought to consider promptly the expediency of having all canned goods sorted at one depot, and the rejected tins being destroyed in a refuse destructor. The chances of any rejected tins then getting into the hands of the "gang" would be reduced to a minimum. Any of the vestries who possess a refuse destructor, adjacent to the wharf at which the sorting took place would, in view of the public importance of the question, doubtless gladly arrange for such periodical destruction of rejected tins.

MARGARINE AS BUTTER.

On December 19th, Walter Sayer, of 170, Church-street, Deptford, and William Staines, of 24, Rose-terrace, Trundley-road, Deptford, were fined 40s. and costs each for selling margarine as butter. The cases were taken at the instance of the Greenwich Board of Works.

Suppressing Adulteration at Nuneaton.

VINEGAR, OR WHAT?

At the last meeting of the Nuneaton and Chilvers-Coton Local Board, the Clerk stated that Inspector Poulney had taken a sample of vinegar which the County Analyst pronounced to be nothing but acetic acid and water coloured brown. Mr. Melly proposed that the tradesman be prosecuted. Mr. Knox said it was no use to employ a Foods and Drugs Inspector if proceedings were not taken in such a flagrant case. He seconded Mr. Melly's motion, and it was carried unanimously.

IN ENGLAND HE WOULD BE MADE MINISTER OF AGRICULTURE, OR A GOVERNMENT SCIENTIST.

The *Omaha Stockman* says:—"An amusing incident occurred a day or two ago in the hog yards at Omaha. The new Government Hog Inspector condemned a big fat sow as too far advanced in pregnancy to be used as human food. The commission man insisted that the sow was not pregnant, and all the regular inspectors and shrinkers agreed with him. The big chief, however, knew better than all the rest put together, and the sow was condemned. In order to test the matter the sow was killed and found as barren of pigs as a barrow. The whole Government inspection as carried on here is a farce and a nuisance, and, as Secretary Morton said on entering his office, it was in many instances simply an excuse to feed incompetent men at the public crib."

POWELL'S BALSAM OF ANISEED—FOR COUGHS.

Powell's Balsam of Aniseed—Coughs and Asthma.
Powell's Balsam of Aniseed—Coughs and Bronchitis.
Powell's Balsam of Aniseed—Coughs and Hoarseness.
Powell's Balsam of Aniseed—Coughs and Lung Troubles.
Powell's Balsam of Aniseed—Coughs.—Safe and Reliable.
Powell's Balsam of Aniseed—Coughs.—Established 1824.
Powell's Balsam of Aniseed—Coughs.—Refuse Imitations.
Powell's Balsam of Aniseed—Coughs.—Sold by Chemists.
Powell's Balsam of Aniseed—Coughs, Night Cough, Influenza.
Powell's Balsam of Aniseed—Coughs Relieved Instantly.
Powell's Balsam of Aniseed—Coughs.—The Oldest Remedy.
Powell's Balsam of Aniseed—Coughs.—Trade Mark.
Powell's Balsam of Aniseed—Lion, Net, and Mouse.
Powell's Balsam of Aniseed—1s. 1½d., 2s. 3d.

NOTICE TO ADVERTISERS.

The London Press Exchange, Limited, 183, Strand, are no longer employed as advertisement agents for FOOD AND SANITATION, nor are they authorised to transact any business for, or collect any monies on behalf of FOOD AND SANITATION. Accounts should be paid to M. Henry, FOOD AND SANITATION, 183, Strand, W.C., whose receipt only is valid.

YEAST !! YEAST !!

JANSEN & COMPY.,

WESTMOLENSTRAAT, SCHIEDAM (HOLLAND).
Gold Medal, Amsterdam, 1886.

A GOOD RELIABLE PURE YEAST IS

 JANSEN & CO.'S PARROT BRAND.

TRY IT !!!

MAY BE ORDERED DIRECT FROM OUR MANUFACTORY
FRESH SHIPMENTS DAILY.

"FOOD & SANITATION" has over 50,000 Readers: Medical Practitioners, Sanitary Inspectors, Food and Drugs Acts Inspectors, Wholesale and Retail Grocers, Weights and Measures Inspectors, Town Clerks, Solicitors concerned with the Food and Drugs and Public Health Acts, Surveyors, Medical Officers of Health, and the General Public.

CREWE MAGISTRATES ENCOURAGE MILK FRAUDS.

FIVE SHILLINGS AND COSTS FOR THIRTY PER CENT. OF CREAM EXTRACTED.

At Crewe Borough Sessions, on Tuesday, December 12th, before his Worship the Mayor (in the chair), and Messrs. Wallwork, R. Pedley, J. Ainsworth, Wallace Lumb, W. Eardley, W. McNeill, Wilding, and Dr. Hodgson. Thomas Hulse, farmer, Hall of Shaw Farm, was charged with selling milk having 30 per cent. of its cream extracted without informing his customers of the fact, contrary to Section 9 of the Food and Drugs' Act (1875). Mr. Albert Timmis, (a County Council Inspector under the Food and Drugs' Act), said he saw defendant in Moss-street on November 10th selling milk. He purchased a pint, paying 1½d., and then informed defendant that the sample would be analysed. The milk was divided into three portions, corked, sealed and labelled, one of them being sent to the County Analyst, J. Carter Bell, who sent a certificate to the effect that the milk had had 30 per cent. of its cream extracted. The defendant denied that the milk had ever been skimmed. It had come from cows who were not fed on mash, and the milk was poorer. In reply to Mr. Timmis, he acknowledged that on November 15th the Inspector had visited his farm, and had taken milk direct from the cows which the County Analyst had certified to be "first-class milk." Find 5s. and costs, or 14 days. Amongst the Magistrates (of whom there were no less than nine) one was a doctor who should know the result of people buying this milk in the faith of it being good milk, and feeding children on the same. This doctor is none other than the Chairman of the Committee of the Cheshire County Council, empowered to carry out the provisions of the Food and Drugs' Act (Weights' and Measures' Committee), another, Richard Pedley, is a cheese factor and acknowledged judge of Cheshire Cheese.

[It is astounding how magistrates can be so ignorant of their duty as to inflict such paltry fines.]

FINE ON A BATH BUTCHER.

At Kilmersdon petty sessions lately, before Lord Hylton, chairman, Lord De Blaquiery, Messrs. W. A. Daubeny and J. H. Shore, Benjamin Short, butcher, of Bath, was summoned for exposing for sale, in Radstock market, on October 28th, five pieces of beef and one of veal that were unfit for human food. Dr. Worger, of Radstock, said that three pieces of beef were decomposed, another was in a very dry state, and a fifth was quite putrid; the veal was also decomposed. Mr. Moore, of Bath, who defended, said he did not propose to deny that the meat was offered for sale, and submitted evidence to show that the defendant honestly believed that the meat was good enough for human food. The defendant was found guilty, and fined £5 and costs, or a month.

CORRESPONDENCE.

SOMERSET HOUSE AND MALT VINEGAR.

To the EDITOR of FOOD AND SANITATION.

DEAR SIR,—Referring to the article which appears in your impression of the 16th inst., in which Mr. Malcolmson, is stated to have said:—"As a matter of fact, malt vinegar, made entirely from malt and malted grain, would not keep more than a few weeks;" and, further, "I don't believe there is such a thing made in England as vinegar wholly from malt and raw grain." Will you allow us to state that for upwards of thirty-three years we have brewed vinegar from malt and barley, with occasionally a few oats, and that we have not used any preparation of sugar, or rice, or acids of any description whatever, and that our vinegars have given very general satisfaction to our numerous customers?—Yours respectfully,

p. pro. Fardon Vinegar Company (Limited),
A. FARDON, Manager.

MARGARINE.

To the EDITOR of FOOD AND SANITATION.

SIR,—I have been for a long while of opinion that there has been far too much outcry against margarine, and that many persons in their zeal for the protection of the farmer's interest forget that there are also other interests of great moment—namely, those of the public, many of whom use it largely as an article of diet. What is really required is, that this substance should not be allowed to be sold as butter, and that the Inspectors under the Sale of Food and Drugs should faithfully administer the Margarine Act. It would be utter ruin to a most important industry to enact that it should be coloured to distinguish it from butter, as it would prevent many persons from using it.

It is a mistake to suppose that this article is manufactured from refuse fats, the scrapings and leavings of slaughter-houses, chandler's shops, and the like. As a matter of fact, it can only be made from the fat of recently killed animals; for once the fat becomes tainted the taste cannot be removed by any known process. Consequently, as a rule, only the very best selected fats are used in its manufacture.

In this country very few investigations have been made into its comparative value with butter, although it is generally acknowledged that a good margarine is better than an inferior butter, which is often only the refuse of the dairies, and is frequently a very dirty article. Such an investigation is highly desirable, and it is to be hoped that if Parliament should take up this question, as it is certain to do, it will enquire into its value as a heat producer and a food, and its digestibility. The subject is one of great importance to our working classes, so many of whom use nothing else.—I am, sir, yours faithfully,

ALFRED E. HARRIS,
Medical Officer of Health,
St. Mary, Islington.

December 19th, 1893.

ARMOUR'S



EXTRACT OF BEEF.

ABSOLUTELY PURE BEEF

Without burnt taste or chemical flavour.—Perfectly palatable.

Unequalled as a stimulating, refreshing, and agreeable beverage during the summer months.
Either hot or iced.

Unsurpassed for quickly preparing soups, sauces, entrées, stews.

COOKERY BOOK, full of useful recipes, gratis and post free.

All chemists and grocers who have a reputation for supplying the best goods only stock

ARMOUR'S EXTRACT OF BEEF.

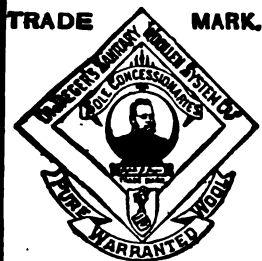
General Offices—CHICAGO.

ARMOUR & CO.,

59 & 60, Tooley Street, LONDON, S.E.

TESTED FOR PURITY NON-SHRINKING AND STRENGTH

Protection from Chill in all Climates.



JAEGER PURE WOOL CLOTHING.

*The Best is the Cheapest!
Fixed, moderate prices for first quality.*

The "JAEGER" Goods are tested for Purity in the Company's own Laboratory and Guaranteed by this Trade Mark, without which none are genuine.

Dr. Jaeger's "Health Culture," and Jaeger
Company's Price List, sent free on application.

WEST-END JAEGER DEPOTS:

8 & 4, PRINCES STREET, CAVENTISH SQUARE (near Regent Circus).
126, REGENT STREET (near the Quadrant).
80, BLOANE STREET (adjoining McPherson's Gymnasium).
456, STRAND (near Trafalgar Square).

CITY JAEGER DEPOTS:

85 and 86, CHEAPSIDE (near King Street).
158, FENCHURCH STREET (near Lime Street).
42 and 43, FOLEY STREET (near Moorgate Street Station).

GRIMBLE'S PURE VINEGAR

Guaranteed BREWED and free from ANY ADDED ACIDS.

GRIMBLE & Co., Limited, Cumberland Market, London, N.W.

PURE **NG & SF** PURE
YEAST *Trade Mark* YEAST

Use 4 ozs. to 280 lbs. Flour, second turn in winter.

For doughing direct, and other methods of working, address—

W. HEPWORTH, Harwich, Essex.

Most powerful Yeast known.

SUPERIOR FLAVOUR. LONGEST KEEPING.

Highest Awards, Healtheries, London, 1884.

LONDON, 1893 (this Year).

LARGEST YEAST WORKS IN THE WORLD.

Chafed Skin, Piles, Scalds, Chilblains, Chapped Hands, Neuralgia, and Rheumatic Pains, Sore Eyes, Ear-ache, Cuts, Sunburn, Insect Bites or Stings, Throat Colds, and Skin Ailments quickly relieved by use of

CALVERT'S CARBOLIC OINTMENT,

Large Pots, 13d. each, with full Instructions.

Court Circular says: "We cannot too highly recommend Calverts' Ointment. It is the best general Ointment with which we are familiar, and ought to be a stock remedy in every household."

Private report from Limassol Cyprus: "I have never found any thing to come up to it for neuralgia and 'Rheumatic Pains.'"

Samples sent Free by Post on receipt of value.

F. C. CALVERT & CO., MANCHESTER.

Awarded 60 Gold and Silver Medals and Diplomas.

TRUE RECIPROCITY!

OR HOW TO MAKE HAPPY ENGLISH HOMES.

If all the Smokers of American Manufactured Cigarettes were to smoke our

"SILVER VEIL,"

or other English Brand, employment would be afforded to Thousands of respectable and deserving English Girls, besides a large amount of additional adult labor.

Why support the product of a country which brags of McKinley Tariff Bill, introduced to devastate English manufactures.

Why not, rather, smoke Cigarettes made out of precisely the same Tobacco, but rolled in English Factories by English Girls, and pay back in its own coin Grab-all Yankeeism.

OGDENS' FACTORIES, LIVERPOOL.

Official Advertisement.

BOROUGH OF LIMERICK.
PUBLIC ANALYST.

WANTED, by the LIMERICK CORPORATION, an ANALYST. Salary £300 a year. He must devote all his time to the service of the Corporation, and act for such public and other bodies as the Corporation may require.

Copies of Testimonials to be sent on or before the 10th of January, 1894, to

ROBERT MACDONNELL,

Town Clerk,

Town Hall, Limerick.

December 21st, 1893.

Food and Sanitation.

SATURDAY, DECEMBER 30, 1893.

CO-OPERATION AND FRAUD.

Co-operators do not mind libelling traders to any extent—even to the length of securing the teaching in public schools of the farrago of ignorance and untruth that passes as co-operation in the very much discussed text-book which Mr. Acland recently had to publicly disavow. But whilst co-operators indulge in these practices with impunity, they are so thin skinned that they cannot bear the plain truth being spoken or written about themselves. It has thus come to pass that the "muzzling" to which the trade press has for so long by threats been subjected, is being tried upon us. The following letter, with its impudent demand for £3 3s. is a specimen of what journals that deal truthfully with present day co-operation may expect:—

SIR,—We have been consulted by the Co-operative Union, Limited, of which the late Mr. Vansittart Neale was Secretary, with reference to the Article which appeared in "FOOD AND SANITATION," Nov. 18th, 1893, reflecting on the Skipton Co-operative Society. This Article goes far beyond the bounds of fair criticism on what took place in the Skipton Police Court, and it constitutes, we are advised, a gross libel.

We, therefore, beg to inform you on behalf of the Skipton Society, that unless a written apology be sent to us by noon on Saturday morning, such apology to be inserted in three newspapers to be selected by the Society, together with £3 3s., to cover costs, proceedings will be commenced without further notice.

Yours obediently,

ASTON, HARWOOD & SOMERS.

THE EDITOR,

"FOOD AND SANITATION,"

183, Strand, London, W.C.

The Co-operative Union, Limited, very much mistake us if they imagine that we are either to be muzzled, intimidated, or blackmailed. To this impudent letter we have sent the following reply:—

December 28th, 1893.

To Messrs. Aston, Harwood, and Somers.

Gentlemen,—I have your letter of yesterday, and decline to apologise in any form whatever to your clients, or to be blackmailed

to the extent of 3 guineas, and shall be very glad of an opportunity of proving in court what I have stated in my journal respecting Co-operation. I have to point out to you that the article to which you refer does not deal with the Skipton Co-operative Society, but with Co-operation in general. If you wish my opinions of the Skipton Co-operative Society I shall be very pleased to oblige you with them, if the Society in question brings an action against me.

I am, yours faithfully,

THE EDITOR.

If the Union are eager to prosecute us we shall be quite satisfied of the opportunity the Courts will afford us to prove all that we have said about co-operation, with some additional facts, which will benefit the public as much as they will damage co-operation, as at present carried on. If such revelations lead to the purging of co-operation of the adulterations to which we have directed attention, they will do nothing but good.

THE LAW AND THE ADULTERATION OF SPIRITS.

By ALFRED E. HARRIS, Medical Officer of Health, St. Mary, Islington (late Public Analyst).

During the last few years the anomalous state of the law respecting the adulteration of spirits has frequently been very forcibly brought under my notice. Day after day cases are taken before Magistrates by Inspectors, appointed under the Sale of Food and Drugs Acts, against publicans for the adulteration of gins, whiskies, and rums, and dismissed because the offenders had exhibited in some part of their bars notices stating that the spirits sold in their establishments were diluted, notwithstanding the fact that the Inspectors have sworn that they did not see such notices. From this it may be judged that if the persons whose duty it was to look for them did not perceive them, the ordinary buyer was even less likely to do so. This loophole for the publicans' fraud on the public seems to have arisen through the well-known judgment of Lord Chief Justice Cockburn in the case of *Sandys v. Small*, in which he said, "I do not think the Statute means that the affixing of the label is to be the only mode of bringing knowledge home to the purchaser. I think if a man puts up in a *conspicuous position a notice in large letters*, as was done here, and it is clear that it must have come under the observation of the customer, that the 6th section would not apply." The italics are mine. Now it has often struck me, taking this as the authoritative decision on the point, that Magistrates frequently dismiss cases in which conviction should have been obtained, without duly weighing this remarkable judgment. According to it there (must in the first place be a notice, secondly, it must be placed in a conspicuous position, and thirdly, it must be printed in large letters. Every one who has had to administer the Sale of Food and Drugs Acts knows perfectly well that such a notice is the exception and not the rule. Indeed, I will venture to affirm that in 99 per cent. of the cases it is the exception. The notice itself is generally lost amidst the large number of show cards describing the merits of ales, stouts or spirits, which adorn the walls of so many publichouses. The "large letters" are a myth, and the "conspicuous position" is a sham. If the letters are to be "large," then the law should define their size and description, and if the notice is to be "conspicuous," then the place to which the notice must be attached should be stated, as it does in the Margarine Act, so that buyers may know where to look for it, or may have their attention attracted to it. The publicans now understand the weakness and leniency of our Magistrates, and in consequence dare to treat the law with contempt. Only the other day a case came under my observation where it was alleged that a notice was placed in a bar. Witnesses swore to its existence, and, indeed, the notice was produced; but it was found out, after the case had been dismissed, that it was utterly impossible to see it from the "snug" in which the spirit had been bought, unless, indeed, the Inspector possessed a good strong squint and was thereby enabled to see around a corner. In future my advice to Inspectors would be to demand the production of the notice, and then to call the particular attention of the Magistrate to its size as well as to the size of the letters, and to ask him to state if they are in accordance with the dictum of Lord Chief Justice Cockburn. In doing so it might be reasonable also to direct his attention to the size and character of the letters, demanded by the Margarine Act, and to ask him to rule that they should be at least the size of those of the label that is affixed to margarine that is exposed for sale.

The extraordinary license allowed to publicans cannot very well be understood, when it is recollected that in section 6 of the Act of 1879 the permissible degree of reduction is clearly laid down, for brandy, whiskey or rum, 25 degrees under proof, and for gin 35 degrees. The necessity for this clause arose through the diversity of the practice of Public Analysts, with respect to the strength below which they deemed spirits adulterated or unduly watered. Originally, too, owing to this uncertainty,

publicans sought to protect themselves by exhibiting notices of adulteration in their bars. But surely when the law laid down a limit, the practice of exhibiting, or pretending to exhibit, these notices should have ceased to be a defence in law. It was certainly a grave oversight by the framers of the Amending Act that they did not introduce a clause making it clear that these notices would no longer be a defence. It is the height of absurdity to suppose that they should protect persons who have adulterated their whisky as much as 45 and even 50 degrees under proof, although such cases are plentiful.

It, unfortunately, happens that spirits, unlike beer or stout, are frequently ordered in times of illness for persons who require strong stimulants, and the medical attendant usually prescribes the dose. But he does so, believing that such spirits shall be of ordinary commercial strength, and not reduced far below the permissible limit. For this and for many other reasons, which it would not be in place to discuss here, some change in the law of the adulteration of spirits should be speedily effected.

THE MAYPOLE DAIRY COMPANY FINED.

At Aberdeen on the 18th inst., William Urquhart, manager of the "Maypole Dairy Company," was charged under the Food and Drugs Act, before Sheriff Brown, with having on 10th November in premises in Market-street, sold about twelve ounces of salt butter, which was not of the nature and quality demanded in respect that it contained 54 per cent. of fat. He denied the charge, and was defended by Mr. J. M. I. Scott. The first witness—the cleaner of the sanitary offices—stated that at the request of Mr. Cameron she called on 10th November at the shop in Market-street. She asked the price of salt butter, and was told it was 1s. 3d. and 1s. per lb. She asked for butter at 1s., and he gave her a quantity in a brown paper parcel. The assistant did not say it was margarine. While she was in the shop the Assistant Sanitary Inspector entered, and took possession of the parcel for the purpose of analysis. Another woman corroborated, and Mr. Carnie, Sanitary Inspector, also gave evidence in support of the charge. For the defence, Mr. Scott called Mr. Beale, manager for Scotland for the Maypole Company, who said that the company dealt both in margarine and butter. All the sub-managers were instructed as to the necessary precautions to be taken in selling and exposing for sale margarine. Accused was then called, and in answer to Mr. Scott said that on the date in question the woman entered the shop and asked at what price did he sell salt butter. Witness said—"At 1s. 3d. per lb." The woman said she wanted something cheaper than that. Witness replied that he had something cheaper—"Margarine at 1s. per lb." The woman thereupon said—"I'll take a pound at a shilling." Witness accordingly took a shilling packet of margarine, wrapped it up in the woman's presence, and gave it to her. Accused also deposed that when the Sanitary Officer informed him that he was to have the butter analysed, and offered him a third of it, witness said he would not have it as a sample of butter, because he had sold it as margarine. The assistant in the shop, who stated that he was quite close to the accused at the time the purchase was made, gave corroborative evidence. After hearing the prosecutor and Mr. Scott, the Sheriff said he was quite unable to uphold the proposition of the defence. No person was involved in the case, except accused, the position of the company being in no way affected. There was no doubt from the report of the Analyst that the article sold was not in terms of the statute. He found the charge proven, and imposed a fine of £3, with the option of fourteen days' imprisonment.

HE SHOULD PROSECUTE THE FARMER.

At Bristol Police-court, on December 20th, John Cannings was summoned for, on the 28th November, selling new milk which was not of the nature, substance, and quality required by the Foods and Drugs Act. Mr. R. A. Moger prosecuted on behalf of the Urban Sanitary Authority, and Mr. H. C. Moore defended. Mr. H. C. Montague, Inspector under the Act, said he had visited the defendant's premises on the 28th November, and was supplied with a pint of milk by the defendant's wife. The milk was divided into three parts, one of which was kept by the defendant, one was sent to the City Analyst, and one kept by himself. He had received a certificate from Mr. Gatehouse, which showed that 10 per cent. of water had been added. Mr. Moore admitted that his client had been guilty of a technical offence, of which he was in no way responsible. About a year ago he entered the business and was supplied with milk by agreement with a Mr. Perrett, who had, however, he alleged, misled him as to the quality of the milk. He hoped the Bench would take this into consideration on arriving at a decision. The defendant and his wife were called, and denied that the milk was tampered with after they received it. No other persons than themselves handled the milk. Alderman Bright said he had known the defendant for a number of years, and could give him but the best of characters. Alderman Sturges also said he had known the defendant for more than twenty years. He had always borne an irreproachable character; he was a most conscientious man. The Chairman said he himself could testify to the defendant's character. The Bench believed with him that he had sold the milk as supplied to him, but they must protect the public. Though not morally guilty, legally he was, but they would only inflict the nominal penalty of 1s. and costs.

LARD SUBSTITUTES.

Lard substitutes have become a necessity by virtue of that law in life that fixes nearly every earthly thing—supply and demand. The supply of lard is no longer what it ought to be, either in quality or quantity; and improved knowledge and taste demands something better than lard for many purposes, where formerly it was the only thing used. A great deal of lard has had the oil taken out of it, and sold for illuminating purposes, to railroads, etc., and the lard that is left is the hard, white stuff that you sometimes see in the shop windows, in nice dry (not greasy) vessels lying on their sides, the lard surface bedecked with scalloped paper, and cranberry figures, and it hardly melts even when the sun shines on it! When do you think it will melt in your stomach? Good lard will run or melt on a pleasantly warm day. This trick of taking the oil out of lard is limited to some manufacturers. The farmers can't do it; their business is not extensive enough. There are large quantities of first class lard constantly turned out by the manufacturers, but it behoves the consumer to see to it that he gets it. There is also a way of adding large quantities of water to lard. The cook knows when she gets this sort: it spatters all over the stove when used in frying. On the other hand, when lard is used in making pastry, it leaves a peculiar taste of its own that people nowadays don't like (though probably their grandmothers fed them on it, three times a day in their young days), and so, altogether, there is a demand for something more reliable, and something better than lard. Cotton-seed oil comes the nearest to supplying this demand. But for many reasons it has been found advisable to mix with the oil some animal fat substance, usually derived from beef fat. Such combinations are both healthful and economical, and are now being largely used in place of lard. (Why don't the farmers squeal about this hurting their business and appeal to the Legislatures, Congress, etc.? There would be about as much wisdom in it as there was in the oleo below.) The names of these lard substitutes indicate that there is no secret about the bulk of their ingredients. Take, for instance, Swift's Cotoaset, now a well established product on the market. It is healthful, cheap and readily digested, as fats go. Such substitutes are better than lard for those people who are peculiarly sensitive to lard in their digestive apparatus. Some of these days our California and Southern friends will provide olive oil cheap enough for some cooking purposes. But this is one of the pleasures in store for our future generations to make up for the weak digestions we shall entail to them.—*Household News.*

PATENT AND QUACK MEDICINES.

The seventh lecture of the twelfth session of the Edinburgh Health Society was delivered in the Free Assembly Hall by Dr. Joseph Tillie, F.R.S.E., on "Patent and Quack Medicines." The lecturer dealt with the advertisements of the vendors of such medicines, and said that those who administered the law took a very mild view of advertising falsehoods. He next showed the great difference between their actual cost and their selling price. The Government stamp attached to quack medicines was not a guarantee of safety. It was not to be wondered at that, in a population where the bulk of all classes alike was profoundly ignorant both of the elementary structure and functions of the human body and the most elementary knowledge of the nature of drugs and of disease, quackery should live and thrive, and quack medicines gain a great deal of credit to which they had no real claim. Nothing could be more dangerous than to blindly administer even well-known active medicines, without any clear knowledge of the nature of the illness or of what was being administered, what its action would be, and why or how that action would be beneficial. It was much more objectionable to administer unknown substances on the unfounded faith of a printed label, for everything mysterious and secret in medicine was to be condemned, and the strongest light should be thrown upon all that affected the health and lives of human beings. They should use the utmost caution or refuse to purchase all those articles (lotions, internal medicines, disinfectants, and foods) unless, as was the custom in several European countries, the exact composition was declared. They need have little or no fear that they were depriving any one of the reward of his discovery. If there has any true discovery, the inventor could prove it by seeking the protection of a patent. The great bulk of secret preparations were in no sense discoveries, but merely the work of commercial adventurers. The real discovery which was frequently made was that the public are easily duped.

MORE PROSECUTIONS FOR YEAST ADULTERATION.

At Spalding, on December 19th, George Eli Emmerson, confectioner, Spalding, was summoned for selling on November 17th, 1lb. of yeast adulterated. The charge was admitted. Inspector Rodgers said he paid 8d. for a pound of yeast, and then delivered a notice saying what he was going to do with it. Supt. Jarvis said he received the samples, which he had had analysed. The yeast was found to be adulterated with no less than 15 per cent. of potato starch. The defendant said that his daughter wrapped the yeast up in a wrong piece of paper. On November 27th, 1893, defendant was fined 25s. including costs. The Magistrate imposed a fine of 30s. including costs.

Confectioners, bakers, grocers and yeast dealers will be wise if they give heed to the above case and refuse to deal in adulterated yeasts.

WAS THIS ONE OF LLOYD'S COWS?

Sarah Ann Bailey, of Little London, was summoned at Spalding, on December 19th, in respect of a quart of new milk being adulterated on November 17th. Inspector Rodgers spoke of purchasing a quart of milk of the defendant's daughter for which he paid 8d. Supt. Jarvis said he received two samples of milk sealed, which he forwarded to Mr. O. H. Southwell, Ph.D., F.R.M.S., Public Analyst, one of which was adulterated. His certificate was as follows:—

"I am of opinion that the same sample of milk marked S. H. 187, has been adulterated with water. The exact amount of water added can only be told when the original composition of the milk is known. If the original composition of this particular sample of milk was that of the poorest milk which a healthy, fairly-milked cow is known to yield, on an average, to every 100 parts of the same sample of milk 9 parts of water have been added. I am therefore of opinion the same sample of milk has been adulterated with not less than 9 per cent. of water. No change had taken place in the constitution of this same sample of milk, that would interfere with the analysis."

Mr. E. W. Bell, chemist and druggist, Spalding, was called as a witness to disprove the report of the Public Analyst, but it appeared from his evidence that he had not subjected to examination the portion of the sample of milk left by Inspector Rodgers with the seller. Mr. Bell said on Wednesday last, at Mr. Bell's request, he went to his premises and saw two cows milked in his presence. He brought a sample away with him which he analysed. The sample just reached the lowest standard by which Analysts judge the quality. (Mr. Bell did not say what Analysts he referred to, nor did he give the details of his analysis.) He was shown the food which the cows had been given, and he considered the milk would be poor owing to the character of food which the cows had received. He said there were several cases on record where milk had been analysed, and had come under the standard. Supt. Jarvis: Do you dispute the Analyst's certificate? Mr. Bell: No; not having examined the sample of milk. In answer to another question, he said that he took it the Analyst held the same opinion as himself, for he (Mr. Southwell) stated in his certificate that unless the original composition of the milk be known, it was impossible to say exactly the amount of added water. (It will be seen on reference to the certificate quoted fully above that Mr. Bell, perhaps involuntarily, misrepresented the certificate of the Public Analyst, which states that "if the original composition of this particular sample of milk was that of the poorest milk which a healthy fairly-milked cow is known to yield," there were at least nine parts in 100 of added water.)

The daughter of the defendant said the milk was not as good as it generally was. The defendant said that she milked the cow, but the milk was much better now than it was then. Supt. Jarvis said he relied on the report of Mr. Southwell, the Public Analyst. The Chairman said the Bench had weighed the matter thoroughly, and had come to the conclusion there must be a conviction. Defendant was fined £1 and costs.

COFFEE AND CHICORY PROSECUTION.

At Buntingford Petty Sessions, on December 8, George Moule, grocer, Cottared, pleaded guilty to selling coffee at Cottared, on November 10th, not of the nature, substance, and quality demanded, and such coffee being found on examination by the Public Analyst to be adulterated with 50 per cent. chicory. He was fined 12s. 6d., including costs.

HORLICK'S
MALTED
For Infants and Invalids. MILK
 CONTAINS PURE MILK, WHEAT AND BARLEY MALT.
 NUTRITIOUS, DIGESTIBLE. GUARANTEED ABSOLUTELY PURE.
 OF ALL CHEMISTS AND STORES.
 SAMPLE FREE. 39, SNOW HILL, E.C.

AGRICULTURAL DEPRESSION AND THE WHISKY TRADE.

A LECTURE DELIVERED BY DR. JOHN T. WOODSIDE, AT HOLYWOOD, BELFAST.

Agricultural depression seems to be exercising the minds of learned men and financiers to a great extent at the present time.

The subject was discussed at the last meeting of "The British Association." Parliament has appointed a Special Commission to enquire into its cause and remedy, and the National Agricultural Union has held a Congress in St. James's Hall, London, for the purpose of advising the Government what to do.

During the past year there has been a continued depression in the agricultural industries, which, according to Lord Winchester has assumed the proportions of a national disaster. It is the common opinion, held by most people of the present day, that something must be done by Government, and that right speedily, to save from impending ruin the farming interests of Great Britain and Ireland. It seems to my mind that up to the present time no single individual, however, has succeeded in suggesting a perfect remedy. It is the peculiar province of our noble profession to deal very largely in methods of cure, and I come before you to-night to present you with a perfect remedy for the present agricultural depression. I shall derive no advantage by puffing a quack remedy, but I mean to suggest a perfect cure, which shall be both local, sure, practicable, and drastic in its effects.

As an Irishman and a native of Ulster, I am specially interested in anything which may conduce to the welfare of this province or the adjacent Kingdom of Scotland, which supplied our immediate ancestors to populate the counties of Derry, Antrim and Down.

I boldly assert, without fear of contradiction, that no place on the face of the earth is better adapted to the production of the hardy cereal crops, oats, barley, and rye, than the hills and dales of "bonnie" Scotland, or the smiling valleys of "Ulidia." Yet look around, and the sharp eye of a casual observer cannot fail to see that acres and acres of land which bore crops of golden grain a few years ago now lie comparatively idle in grass or pasturage.

Ground which supported ten labourers engaged in weeding, hoeing, planting, reaping, now only requires a single cowherd, or, at most, a few labourers for one week in hay-time. The other nine may hope for sustenance in emigration, or, resorting to our large towns and cities, where they crowd each other out of employment, and go to swell the population of our gaols, work-houses, and asylums. This, again, has a reaction, and the lack of farm labourers has raised the price of labour. Farmers have to pay higher wages, and, therefore, reduce accordingly the cultivated area, which, in its turn, would naturally react on the price of farm produce in the market. Food stuffs in a short time would be beyond the purchase of most individuals, were it not for the blessing of free-trade, which acts as a gracious counterpoise, and insures that the working-man may still obtain his 4 lb. loaf for 6d.

Free-trade is admittedly a blessing to this country, but it certainly is not an unmitigated "boon." Free-trade is chargeable to a great extent with the present agricultural depression. No doubt other causes have assisted. Increased railway rates have considerably harassed the agriculturist, while the gross system of fraud and adulteration which has been disclosed in regard to such commodities as butter has handicapped to a very great extent the honest farmer. Not only does wheat, the staple source of wealth, come from Russia and America, and eggs from France, but butter is now imported in enormous quantities from New Zealand and Australia, while at the present time no less than eleven large establishments for the manufacture of "margarine" exist in England, and in some places the scientific adulteration of butter with "margarine" is carried on to such an extent that it has been almost elevated into a fine art. Truly the Government must come quickly to the rescue of the sinking agriculturist.

I would like to quote you the words of a London journal called *FOOD AND SANITATION* on November 18th, 1893:—

"Why is it that the Merchandise Marks Act is not enforced? It was to put down frauds that, at enormous expense to this country, the Merchandise Marks Act was passed, and we have a Board of Trade costing £74,000 per year, whose duty it is to deal with this and other measures to protect traders from injury. What have traders got in return for this vast expenditure? Last year there were only six prosecutions under the Merchandise Marks Act, not one of which was instituted by this idle, useless Board. The Right Hon. A. J. Mundella, for long service as a political hack, draws £2,000 per year, and a host of lackeys of one political impostor or another, cut up amongst them the remainder of this £74,000 per year; but as to earning their wages by doing one particle of real work to benefit English trade—well—the Railway Rates muddle, and the Merchandise Marks Act are sufficient proofs of the fact that not one useful spontaneous Act has emanated from this disgraced department for the benefit of English trade.

"This is the traders own fault.

"So long as he will be content to sup political 'pap' sugared with Liberal or Conservative humbug, so long will the political quacks who administer it, laugh at him as a fool, and squander his money in prolonging their useless official existence.

"There are parties that could well be spared for one that is most needed—a *trader's party*, concerned with the useful work of developing and fostering the agricultural and commercial industries of the United Kingdom."

I have ever been an advocate of free trade, and the man would be possessed of considerable temerity who would venture on a public platform at the present day to advocate protection. Yet for all that, I am a strong believer in protection; not the McKinley tariff variety, but the protection offered us by the full and perfect administration of the Merchandise Marks Act. When we pay for our wares, we have every right to know what we purchase, and where produced: whether they are manufactured in Sheffield, or "made in Germany." Who would not be anxious, if purchasing Lipton's best bacon, to know for a certain fact whether it was "mild cured" in America, or Belfast. Why, I ask, should we not be consistent in all our business transactions? The Government which compels a grocer to label his tins a mixture of chicory and coffee, or fines him for selling "margarine" by the name of "shilling butter," offers us no such protection in the case of our most expensive luxuries. Let the Merchandise Marks Act be brought to bear on some of our beverages, and most of us shall be surprised, if not delighted, to read on many of the labels which adorn our best brands of whisky, some very startling disclosures like the following:—

"This choice blend is sold as a mixture containing a very small amount of honest whisky, mixed with a large quantity of 'patent-still' spirits, derived in this country from yellow Indian corn. It is freely adulterated with highly rectified German potatoe spirit, manufactured abroad by distillation from bad potatoes, spoiled fruit, decaying grass seed, and a variety of other nondescript articles. It is exceeding mellow, being now 1½ month's old, and has been highly recommended by connoisseurs and the medical profession."

At all times, and in all ages, mankind has evinced a longing desire for some exhilarating subtle fluid, entirely outside himself, which, when diffused within himself, can make him feel above himself, or, in other words, can oil the *gudgeons* of life and make the wheels run smooth, can make the flame of life burn brighter, and the cares of life feel lighter.

That being the case, we may never expect any earthly power, this side the millenium, to entirely annihilate the use of strong drink. But like those forces—fire, steam, electricity, which are now subservient to man, it requires to be very carefully manipulated and properly controlled.

Whisky floats our Government. The Chancellor of the Exchequer places his whole trust and confidence on whisky. Whisky pays the largest dividends, whisky princes are amongst our millionaires, and England as a commercial nation manufactures whisky to supply the world. Would it be an unreasonable demand to expect our Government to guarantee good value for his money to the consumer?

But, alas! what an amount of deception the gullible British public annually swallows without murmuring or complaint. A man anxious to pay for a glass of honest whisky is supplied "bare-facedly" with a solution of liquid poisons.

Before proceeding any farther, allow me to say, by way of parenthesis, that I do not stand here to-night as a temperance reformer, although I may, in the course of my remarks, refer very much to the sale of whisky. I shall only speak in general terms, and no word of mine must be construed as casting blame or reflections on any person or persons, either engaged in the blending, sale, or manufacture of this article of commerce.

In the elementary text-books used in National schools, alcohol is said to be a product obtained by distillation from fermented corn or barley. So in childhood's innocence we were taught to believe, and so the drinking public blindly imagine; "but man that is evil has sought out many inventions." And the philanthropists and temperance reformers who rant and rave about the quantity of corn and bread stuffs annually turned to destruction, will feel surprised to learn that not a pickle of corn or barley is now required in the manufacturing of whisky by the new patent-still process. Seven-tenths of all the whiskies manufactured in these countries is produced from imported Indian corn, and the "alumage" of the distilleries is only the exhausted residue from "crushed yellow corn" when the "wort" has been removed. This, then, is one of the most prominent causes of the present agricultural depression. The enormous and ever-increasing importation of yellow Indian corn; not for horse-feeding, as simpletons imagine, but to be used in the production of WHISKEY as a beverage for man. Money which should circulate amongst Irish fields and peasants is transferred to our swarthy, woolly-headed brethren "way down in Tennessee."

Chemists sometimes tell us, with a knowing kind of nod, that anything and everything composed of starch or sugar may be pressed into the service of the distiller, and well they know the secret, and believe it in their hearts. Not long ago a cargo of dates consigned to Belfast were found on their arrival damaged

by water and fermenting. The merchant, unwilling to sustain so great a loss, picked out all the stones and washed them, the dates he sent to a distiller, who bought them to make whisky with at half their selling price; this cleared the freight and cost, then the profit came on the stones. These were taken to the mill, dried and roasted and ground, and exported to France to mix with French coffee, which they send back here for the use of English consumers.

A vile kind of rubbish called foreign patent spirit is imported into these countries "made in Germany," from anything and everything under the sun. It is used in large quantities by the blenders, because they get it cheap. This again affords an additional clue to the decreasing demand for corn and barley.

Why, I ask, does a Government, depending for its very existence on the sale of whisky—why do they not compel the producers to manufacture whisky from home-grown grain? The demand would soon create a supply. Price of grain would go up in the market. Agriculture would become remunerative. Whisky, which pays the highest dividends, could well afford the cost. Country life would become more and more profitable. The poor who congest our towns and workhouses would be redeemed from the miseries of socialism, poverty, and starvation. Acres long resigned to pasture would once more wave with crops of golden grain. An honest peasantry, our country's pride, would once more bless our land, and agricultural prosperity be attained. At the present time the Government permits the sale of drink under certain conditions. On every ounce made or imported duty must be paid. Then the Government grants a license to publicans to retail this whisky if kept at a proper strength.

Duty is paid on whisky at 10s. 6d. per gallon at the strength called proof; and whisky strength for drinking as sold by the publican is 25 degrees below proof. Now the bonding of whisky would require enormous space if kept at proof strength, but this difficulty is obviated by receiving whisky from the distillers at 25 to 40 deg. over proof. One hundred gallons of alcohol at 25 over proof would require an addition of 25 gallons of water to reduce it down to proof, and 25 gallons more added water to make it publican's drinking whisky. In other words, 100 gallons of whisky at 25 over proof becomes 150 when ready to retail. Now duty is struck on alcohol at the strength called proof, so a gallon at 25 over proof would be charged at duty and a fourth, as its volume would increase to one and a quarter gallons if reduced to duty strength.

Now the cost of whisky at 25 over proof, as received from the distiller before the duty is paid, ranges in price according to quality from 1s. 9d. to 3s. per gallon. What! impossible!! No, not possible. What then makes the whisky so dear? Well, all the distiller gets for producing it is 1s. 9d. or 3s. per gallon, the remainder is either duty or profit.

The publican purchases 100 gallons of best old whisky in bond. He pays 3s. a gallon at 25 over proof, 3d. a year for age is added, so seven years old means 1s. 9d., which runs the cost to 4s. 6d. Duty struck at proof would mean about 13s. 1½d. at 25 over proof, making the whisky when leaving bond about 18s. per gallon, or a cost of £90. To this must be added about five gallons of good sherry wine, at a cost of a crown a gallon, to give it a mellow rich bouquet. So you have 105 gallons whisky at £91 5s. This retails at 6d. per Imperial glass, or 32s. per gallon, which would give a return of £168, or a clear profit of £76 15s., if sold at the same strength at which it left the bond. But alcohol cannot be used at 25 over proof, and so the publican is obliged to add by Government permission, 50 gallons of water before it is reduced to drinking whisky strength. Therefore, 50 gallons of water at 32s. per gallon, is retailed by Government permission at a sum of £80, making a grand total of £248, or the amazing profit of £156 15s. on the original transaction.

Two kinds of whisky are known in the bond, one, the old sort made from home grown grain. Corn, rye, and barley, is not "ripe" for drinking, till it has "matured," for which purpose it should be kept from five to seven years in wood. It is known by the name of *pot-still* whisky, seven-tenths of the whole of the whisky in the land belongs to the other kind, and is known as new patent whisky, and is produced in this country from yellow Indian corn, but may be made from almost anything under the sun.

It is hot, vile rubbish, burning the throat, and poisoning the brain, and does not improve by keeping. Indeed, it is often swallowed at the public-house bar inside, thirty-six hours from the time it left the still. And the producers are glad to have it so, for I believe if kept for over two years, it will undergo a process of rotting, as mariners know their casks of water do on board ship.

This patent whisky will bear a much larger quantity of water before it is reduced to a point at which it may be swallowed with a moderate amount of discomfort. And often do we see the Excise convicting publicans for retailing this whisky at 44 degrees under proof, thereby producing a return of 200 per cent. interest on their money. In other words, 100 gallons of rectified spirits at 62 over proof would be retailed as 206 gallons, at 44 under proof.

Who would not be a retailer and swindle the British public? This throws the Italian quack Count Matei completely in the shade, who "gulls" the English people with his pure distilled water under the name of red, white, and green electrica at 5s. per oz., promises to cure everything, and guarantees it to do no one any harm.

Now, if our Government would conscientiously apply the Merchandise Marks Act to all our beverages, then—

2ndly, prevent all distillers from using anything in the manufacture of whisky but home-grown grain.

3rd. As free-trade would still allow of the importation of foreign spirits, the Government could direct that all such spirit be used for no other purpose than the production of mythylated spirit.

4th. Allow no whisky to be taken out of bond that has not been five or seven years in wood.

5th. Reduce the duty on spirits to 5s. per gallon and give the difference to the distillers as a bounty, in order to enable them, under the altered conditions, to still produce the whisky at the present price.

6th. Bond the whisky from the distiller at 40 over proof.

7th. Allow no whisky to pass out of bond at a higher strength than 15 under proof. That is, instead of licensing the publican to retail water at 32s. per gallon, and so swindle the consumer without any commensurate returns, let the Government add the water.

Then the Government on every million gallons of whisky annually passing the bond would realize 5s. a gallon of duty, and sell 500,000 gallons of water at a pound or 25s. a gallon.

That in a very short time would produce a revenue which would enable them entirely to obliterate our present Income Tax.

What advantages would be likely to accrue from this course of procedure?

1. Better quality of drink.
2. Largely increasing sale.
3. Increasing export trade.
4. Larger Revenue.
5. Reduction of duty.
6. Reduction of taxation.
7. Rise in the markets for corn, rye, and barley.
8. Increased area of cultivation.
9. Increased returns to farmers.
10. Better wages to labourers.
11. Amelioration of poverty and distress.
12. Reduction in the population of our gaols and workhouses.
13. Less insanity.
14. Entire extinction of all "low pubs."
15. The question of "vested interests" would be solved without expense.

Is such a desirable consummation within a measurable distance of present practical politics?

Yes, I say emphatically.

1st. The temperance reformers would support the Government for the improvement it would make on our present condition. Whisky hells, and half ones over the counter, could not be worked at a profit sufficient to pay, and would soon be a thing of the past.

2 The drink consuming public would support the Government for better drink and less duty.

3. The labouring vote would support the Government for producing more employment and better wages.

4. The farming population would support them for making better markets.

5. Payers of income tax would support them to have that burden obliterated.

6. Ratepayers would support them as the county cess, and poor rates would be reduced on account of the diminishing population of gaols, workhouses, and asylums.

7. Philanthropists, ministers, mothers and wives would hail the day when large and respectable bottlers would hold the liquor trade. When questionable pubs and whisky hells, with all their vile associations of vice and immorality would for ever disappear.

To sum it up in a few words. If ever agricultural prosperity shall bless this land of ours, it shall only be accomplished by a drastic sweeping reform of our present drink trade.

IMITATION NEWTON PIPPINS.

The adulterator of articles of food has attacked our apples. From the arrival of the earliest crop of Newton pippins every year from America, no dinner-table is seen without them. But housekeepers must buy warily, as the spotted skin is no longer an evidence of the apple being the genuine article. Some ingenious swindler discovered that it was possible to spot the skins with a sprinkling of a preparation of vitriol, and this has been done, afterwards packing the fruit in old Canadian barrels. The only defence against a fraud of this kind is to deal with a respectable tradesman, grocer, or greengrocer, who could not himself be victimised, and eschewing street carts and the inferior markets.

NOTICE TO READERS.

Back numbers of the Journal are now very scarce, and can only be supplied in future at 3d. per copy when over a month old. Vols. 1 and 2, including index, 20s. each. Index separate, 1s. each.

DAIRY-FARMING IN 1892-1893.

By ROBERT E. TURNBULL, BURNELL HOUSE, SHREWSBURY.
(From the *Journal of the British Dairy Farmers' Association*.)

According to the agricultural returns, there were on farms in the United Kingdom on the 4th of June last year (1892) 4,120,450 cows and heifers in milk or in calf. In the feeding pastures at that date the number of draft cows would be about 228,900. These in the agricultural returns are classed as "other cattle two years and above." In 1892 the number of heifers served to calve in the spring of 1892 would be about 764,500, and the number of heifers served to calve in the autumn of 1892 would be about 382,500. In all, probably 1,147,000 heifers were served to calve in 1892. Of these, 90 per cent. would be classed in the course of 1892 as cow and heifers in calf or in milk; of the remaining 10 per cent., from one-third to one-half may be estimated as having been lost, and the rest, being barren, would be fattened for beef in 1892. The cows and heifers in calf or in milk on the 4th of June, 1892, may be classed as follows:—

65½ per cent.	2,017,450 cows in calf or in milk, kept.
	487,000 cows in milk, fattened during the year.
	384,000 heifers in milk. 1st calf in the autumn of 1891.
84½ per cent.	488,000 heifers in milk. 1st calf in the spring of 1892, 344,000 heifers in calf.

4,120,450

In the feeding pastures, about 228,900
Lost during the year 1891-92, 228,900

Cows and heifers in calf or in milk 4,120,450

On the 4th of June, 1892	4,349,850
Of the Cows and heifers in calf or in milk or in feeding pastures on the 4th of June, the cows and heifer in calf or in milk to be kept represent 75 per cent. of the full herd.	
The cows in milk to be fattened represent 15	"
The draft cows in feeding pastures represent 5	"
The cows and heifers lost during the year represent 5	"

100

In order to keep up the herd to the full strength of 1892, the number of heifers served to calve in 1893 would be 1,144,500, or equal to one-third of the number of cows and heifers in calf or in milk "to be kept," and equal to one-fourth of the full herd.

From the number of cows and heifers in calf or in milk on the 4th of June, 1892, "to be kept," 10 per cent. may be deducted as non-effective, in consequence of casualties and barrenness. The cows in milk at that date and which were fattening during the year would probably be in milk, on the average, two-fifths of the year. The heifers served in 1892 would be in milk, on the average, about two months previous to the census of 1893.

The number of cows and heifers from which a year's yield of milk would be obtained would be equal to 3,480,000. In ordinary seasons the yield of milk would be about 40 cwt. per head, equal 139,200,000, or nearly 7,000,000 tons; but the summer of 1892 being excessively dry in the south and excessively cold and wet in the north, and the winter and spring following being also unfavourable, it is probable that the average yield did not exceed 37 cwt., or 7½ per cent. below the usual estimated average. 40 cwt. equal about 448 gallons. The average value of new milk at the farm has for several years past been about 6s. 6d. per cwt., and the cost of production to the farmer has been from 5s. 6d. to 6s. 6d. per cwt., according to the character of the season and the price of purchased foods. When the cost of production is 6s. per cwt. and the average yield 40 cwt., the cost per cow is £12, and the value of the milk at 6s. 6d. per cwt. is £13; showing a net profit, exclusive of the value of calf, of £1 per cow. The calf adds from £1 to £1 10s. per cow, according to the price of calves. In the year ending on the 4th of June, 1893, the average cost of producing milk would be 6s. 6d. per cwt. The only profit, therefore, would be in the calf; this profit in the last year would not exceed £1 per cow, or in all, £3,480,000. Small as this profit is, it compares favourably with the result of wheat growing.

In good seasons, with an average yield of 4 qrs. per acre, wheat, when the straw is kept on the farm, costs about 30s. per quarter to produce. In 1892, the yield of dressed grain having only been about 3 qrs. per acre, the cost per quarter was fully 40s., and the average price realised for all qualities has only been about 25s. per quarter; the loss has therefore been fully 45s. per acre. In no branches of farming can capital be more usefully and safely employed than in the production of high-class dairy produce and meat of the best quality. The best market in the world is at our door. We have the best pastures, and we have in our herds milk and meat-producing cattle that are unexcelled, and a population that, so far as milk is concerned, could with advantage consume double the quantity that is at present disposed of for household use.

The total quantity of milk produced in the year ending 4th June, 1893, at 37 cwt. per cow, would be 6,488,000 tons disposed of probably as follows:—

For household use.....	33 per cent., equal to	2,124,540 tons.
For butter making.....	32	" " 2,060,160 "
For cheese making	20	" " 1,287,800 "
For calves	15	" " 965,700 "

6,488,000 "

The consumption of new milk, considering its great value as food, is far below what it should be, and probably will be when its value becomes more widely known, when facilities for production and distribution are increased, and when the average quality is improved. At present the average daily consumption of new milk does not exceed 35-100 of 1lb. per head of the population, and possibly not more than one-third of 1lb. In London and Hull the average daily quantity consumed is found to be only about ¼ of a lb. In some country districts, where the consumption might be supposed to be on a liberal scale, children hardly know the taste of milk. About one-fourth of the sweet skim milk is probably consumed in the household. The quantity for household use in the last year would therefore be about 9,270,000 cwt. Its value may be put at 2s. 3d. per cwt. at the farm. The average annual consumption of milk is about 153lb. per head of the population, say 15 gallons, in the proportion of 126lb. new milk (82 per cent.) and 27lb. sweet skim milk (18 per cent.).

The total yield of milk in the year ending 4th June, 1892, may be valued as follows:—

37 cwt. per cow—6,488,000 tons at £6 10s.	£41,847,000
Calves, at 20s. per cow	8,480,000

£45,327,000

Had the yield of milk been up to the average of 40 cwt. per cow the value would have been	£45,240,000
Calves, at 28s. per cow	4,872,000

£50,112,000

The profit would have been £8,265,000 or £2 7s. 6d. per cow, instead of 3,480,000, or £1 per cow.

The gross revenue in the last year from dairy produce may be put as follows:—

DAIRY PRODUCE (UNITED KINGDOM).

	£ s. d.	£
2,124,540 tons of new milk, household use	6 10	13,809,510
2,060,160 " " for butter making ..	4 10	9,270,720
1,287,800 " " for cheese making	5 15	7,403,700
463,530 " skim milk, household use	2 5	1,042,940
Value of milk used in cheese making for whey butter		450,660
		£31,977,530

Butter and Cheese.

		80 lbs. per ton of new milk.		280 " " "	
		Per lb.		Per lb.	
		s. d.	Tons.	£ s. d.	£
Butter, average value	1 1½	78,577=	126 0 0	9,270,720	
Whey butter, average value ..	0 7½	6,438=	70 0 0	450,660	
		80,015			9,721,380
Cheese, average value, about ..	0 6½	126,460 =	58 10 10	7,403,700	
					£17,125,080

Summary.

		Per Head of Population.	Per Head per day.
		s. d.	
Milk	14,852,450	7 10	about 1¼ of 1d.
Butter	9,721,380	5 1½	1-6
Cheese	7,403,700	8 10½	1-8
	£31,977,530	16 10	=per family £4 4s. 2d.

In the United Kingdom there are 7,600,000 families. It will be admitted that 1½ quarts per family per day is the least quantity that should be consumed. 1½ quarts per family per day is equal to 115 gallons in the year. The wholesale value at £6 10s. per ton (3,901,785 tons) would amount to £25,181,000, or over £10,000,000 more than the present wholesale value.

To bring about this desirable state of things, we require (1) a knowledge of the value of milk as an article of diet to be more widely made known; (2) more attention to be given to the selection and management of dairy cattle; (3) more reasonable railway rates.

There can be no question that the average yield of milk could, within a few years, be raised by careful selection and management from 40 cwt. to 60 cwt. per cow. It is of vital importance that the bull should be invariably selected from a good dairy cow, and it is also important that his sire should have been from a good dairy cow. No heifers should be served or purchased unless they are from cows that have proved to be abundant producers of rich milk.

Care should be taken to have cattle adapted for the land on

which they are to be grazed. Where the pastures are of good quality, Shorthorns of the right type, such as are to be found in Cumberland, Westmoreland, Craven, in Yorkshire, and to a smaller extent in other parts of England, are desirable. The little Kerry will thrive and yield milk abundantly where a Shorthorn would starve. As a rule, it is best to begin with the breed of the district, and by careful selection to build up a profitable herd. Heifers and young cows should be timed as far as profitable to calve in the spring, and third calf and older cows in the autumn. A liberal supply of succulent food and good hay should be provided for winter keep, and when the pastures begin to fail the flow of milk should be kept up by a judicious allowance of crushed oats, bran, and bean meal. The pastures, when necessary, should be boned or limed. The greatest care should be taken to secure an abundant supply of pure water. It is of the utmost importance that the cows should be placed in the care of thoroughly efficient cattle men. What is worth doing at all is worth doing well, and no branch of farming pays better for intelligent management and constant attention to details than that with which the British Dairy Farmers' Association is identified.

THE EXCESS WATER IN WHISKY FRAUD.

A SOLICITOR MAKES UNFOUNDED CHARGES AGAINST SIR CHARLES A. CAMERON.

At Bangor, Ireland, on the 14th inst., Robert Anderson, publican, Groomsport, was charged by Sergeant Kearney with unlawfully selling whisky which contained 82 per cent. of water, and which was not of the nature, substance, and quality demanded by the complainant, contrary to the statutes made and provided. The Sergeant stated that on the 23rd ult. he purchased three half pints of whisky from Mr. Anderson, one of which he submitted to Sir Charles Cameron for analysis. He received the certificate (produced), which stated that the whisky was adulterated to the extent of 82 per cent. under proof, whereas the Act required it to be only 25 under proof. Mr. McCallum said he appeared for the defence. The Chairman said that the sample of whisky handed in appeared to be nasty stuff. (To the Sergeant): What is that like mud in the bottom? Sergeant Kearney: Colouring stuff. Mr. McCallum said that it might have been caused by the dirty bottle. It was only adulterated with water. The defendant conducted a public-house for over twenty years, and his father and mother before him conducted the business for over forty years. He said that he never put more than one part of water to three of whisky, and he could not account for the present case except that the whisky was not the strength when he got it. Of course, he did not raise that point as a defence, as he had no proof of it. The Analyst said that it was only adulterated with water. The Clerk: A very healthy adulteration. The Chairman: You prefer it with hot water? Mr. McCallum: Yes. With a piece of sugar. (Laughter.) The Chairman said he believed the man to keep a respectable house, but he did not like the look of his whisky. (Laughter.) Mr. McCallum said that the defendant was never up before under the Licensing Act. Sergeant Kearney: He was up some time ago under the Food and Drugs Act for the same offence, and was convicted. The Chairman said that the public must be protected, and they would impose a fine of £1 and costs. They would not, however, endorse the conviction upon the license this time. Defendant: Thank you, sir. Mr. McCallum said that he had not very implicit confidence in Sir Charles Cameron as an Analyst. Some time ago he saw where he was broken down in the Dublin courts. The Clerk: But did you hear how it ended? The case went to Somerset House, and was decided in his favour. Mr. McCallum: I was not aware of that. The clerk (Mr. Barrett) said he had received a circular from the Under Secretary addressed to the Magistrates, which stated that the attention of the Lord Lieutenant had been called to the practice of petty sessions clerks having forms of summonses under the 14th and 15th Vic., cap. 93, signed by a justice in the absence of the complainant. His Excellency was advised that a justice before signing and issuing such a summons should satisfy himself that there was a *prima facie* case against the defendant upon hearing the complaint on which the summons was bought. It was, therefore, decided that the practice referred to should be discontinued. Mr. Barrett said that such an order would be very revolutionary in its operations, and would be attended with a great deal of inconvenience to the public and to their Worshipships. After some discussion between the Bench and the legal gentlemen present, the Magistrates endorsed the circular.

At the Shire-hall, Nottingham, on December 16th, Benjamin Sadler, licensed victualler, Brinsley, was charged with having sold adulterated rum. Colonel Storey, Inspector of Weights and Measures, said he took a sample of rum from defendant's house, and when analysed it was found to contain 87.5 per cent. of water beyond that allowed by law—25 per cent. was allowed. Defendant was unable to attend, and was represented by Mr. Clifton, who said that as a result of the case the defendant would have to leave the house. The Magistrates said it was a very serious case indeed, and defendant would be fined £15.—John Raven, licensed victualler, Watnall, for selling whisky adulterated to the extent of 4 per cent. more than allowed by law, was fined £1.

At Brechin, the Superintendent of Police has reported that on the market night he had taken four different samples of whisky from four houses in the vicinity where that liquor was being sold. The samples were sent to the Public Analyst, who reported that one of the samples was adulterated with water to an extent so that it reduced it to 20 degrees below proof. A remit was made to the Superintendent, with power to institute a prosecution against the parties who are selling the adulterated whisky.

PROSECUTING THE WHOLESALE DEALER.

A short time ago a number of Blackpool tradesmen were convicted for selling adulterated butter, which they alleged they had purchased as the best Kiel butter from a Burnley merchant. On the ground of this contention, Samuel Wild, grocer, of Great Marton-road, Blackpool, claimed £50 from Knaption Fulton, butter merchant, Burnley, for alleged breach of contract on the delivery of certain goods, viz., butter, the substance supplied as butter containing ten per cent. of water and upwards of 60 per cent. of fat other than butter. Mr. W. J. Read was for plaintiff, and Mr. McKenzie (London), instructed by Mr. W. F. Steele (Burnley), defended.—Mr. Read, in stating the case, said that after defendant's conviction at the Blackpool Police-court and the report of the case in the local newspapers, the takings fell off materially, for whereas from March 28th to October 16th, 1893, they were £3,499 16s. 5d. they were £3,290 14s. 5d. the year before, showing an increase at the new shop this year of £209 9s. On the other hand, since the conviction, the takings had fallen off. From October 16th, 1892, to December 3rd the same year, the takings were £164 7s., and during the same period, after the conviction, this year they amounted to £47 18s. 2d. only—a decrease of £116 8s. 10d. Plaintiff, he said, had found that many people would not deal at his shop since the conviction. Plaintiff stated that he commenced dealing with defendant when he was in partnership with Midgeley. They dissolved partnership on April 25th. At that time defendant represented himself to be a traveller. He had no butter from any other dealer but defendant, except one consignment from Pickering in August. He ordered two tubs of Kiel butter on September 4th, and received one on September 5th, and one about September 12th. He had a conversation with defendant on September 11th about the conviction of Sykes and Turner (South Shore) for selling adulterated butter, and charged him with having supplied it. That he, however, denied. Sykes and Turner were convicted for selling as butters substance they had bought from defendant. Defendant then said that he had not supplied them with the butter. A sample of the butter which he obtained from defendant was taken by Inspector Macdonald from the tub he received on September 12th. On September 18th they discussed Sykes and Turner's conviction again, and defendant said, "Our firm won't supply stuff of that sort." Defendant asked him to return the invoices upon which "the boss" should give a written guarantee. He returned the invoices to Burnley, as defendant had represented himself as the traveller to the firm. Instead of getting his invoices back he was requested by telegram to pay the amount of his account—to "remit at once." He wired back on September 21st saying he would go to Burnley and bring the money with him. He went to Burnley, and was told that defendant was away, and on another occasion that he was unwell. Plaintiff handed in receipts for money paid for Kiel butter, and described the police-court proceedings, when he was fined 20s. and costs, the whole amounting to £3 2s. 3d., in addition to which there was one witness 5s. and a solicitor's fee £1 1s. He had since sold some of defendant's butter as margarine, at a loss of £4. His takings in money showed a falling off of £116 8s. 10d. since the conviction compared with the same period in last year. In the course of cross-examination by Mr. McKenzie he stated that his receipts since the conviction had fallen off £116, upon which he would have made a profit of 10 or 12 per cent. The other part of the claim represented costs connected with the defence and other losses. He had never bought "mixture" or "margarine" from defendant. He had paid about 1s. 0½d. per pound for the butter; that was not margarine price. He never received a letter from defendant saying "What we sell as butter we guarantee; what we sell as margarine we don't guarantee." Other evidence was given in corroboration, and plaintiff's case was closed before the Court adjourned. The defence will be heard at the January Court, when two other similar claims are to be tried.

£10 FINE FOR MILK ADULTERATION.

At the Manchester Police-court, on December 20th, John Baker, shopkeeper, Bentinck-street, Hulme, and Joseph Clay, milk dealer, Augustus-street, Stretford, were charged with selling adulterated milk. Baker's shop was visited by an Inspector, who took a sample of the milk, which upon analysis showed that 30 per cent. of fat had been extracted. This defendant, however, pleaded that the milk was sold in the same condition as it was got from clay, who supplied him. Thereupon a sample of milk sold by clay was taken and found to be deficient in fat to the extent of 85 per cent. In both instances there was also a small percentage of added water. The defendant Clay, who urged that he retailed the milk in the same condition as he received it at the railway station, was fined £10 and costs. The summons against Baker was withdrawn.

HOW EXTRA PROFITS ARE MADE OUT OF BEER.

At North London, on December 20th, Arthur Shere, a beerhouse keeper, of Howard-road, South Hornsey, was summoned for diluting beer.—The Defendant pleaded guilty to his servants having committed the offence without his knowledge, whilst both he and his wife were away from the business through illness.—The excise authorities proved nearly six gallons of water in one barrel, and about two-and-a-half gallons in another. Mr. Bros fined the defendant £5 and costs.

"FOOD & SANITATION" has over 50,000 Readers: Medical Practitioners, Sanitary Inspectors, Food and Drugs Acts Inspectors, Wholesale and Retail Grocers, Weights and Measures Inspectors, Town Clerks, Solicitors concerned with the Food and Drugs and Public Health Acts, Surveyors, Medical Officers of Health, and the General Public.

SPURIOUS CONDENSED MILK.

At the last meeting of the Bath Sanitary Committee, Mr. Montagu presented a certificate from Mr. Gatehouse of a sample of condensed milk labelled "Sweet separated milk preserved with the finest cane sugar." The Analyst was of opinion that the same was a sample of condensed separated milk mixed with cane sugar, agreeing with the advertisement on the label. Such a milk mixed with sugar in the proportion above indicated was an extremely poor substitute for cow's milk when used to feed young children who would almost starve on it. It was shown by the Clerk that it would be useless to prosecute in a case like this as the contents of the tin agreed with the representation on the label. Ald. Jolly thought if the matter were made public by the Press buyers would know what they were purchasing. The Clerk (Mr. Moger) reported that he had written to Mr. Gatehouse in respect to the condensed milk reported as analysed by him at the last meeting of that Committee, and had received the following reply:—

"36, Broad-street, November 21st, 1893.

"Dear Mr. Moger,—As the composition of the two condense milks, numbered two and five, corresponded substantially with the advertisement on the label around the tin, I should presume that it would be useless to originate a prosecution, although the amount of sugar was so high as to seriously impair their efficacy as a nutritious food. The public certainly ought to know what they are buying when they purchase these so-called condensed milks, as they are by no means equal to natural milk in any way, and especially if diluted with water to the extent recommended on the label. I conceive, however, that a discussion on the matter in committee, together with the publication of the results of my analyses, would be preferable to a prosecution, which would almost certainly fail to ensure a conviction, besides entailing a certain amount of hardship on the retail seller.—Yours truly,

"J. W. GATEHOUSE."

EVERY RESTAURANT DOES IT.

At Bow-street, on December 20th, Mr. John Pearce, Managing Director of Pearce's Dining and Refreshment-rooms (Limited), appeared to a summons charging him with selling butter adulterated with foreign fat. Mr. H. C. Jones appeared in support of the summons for the St. Giles's District Board of Works. It appeared that a street orderly, named Mahoney, in the employ of the Board, entered the defendant's premises in Oxford-street on the 28th ult., and ordered a glass of milk, two rolls, and three pats of butter. The order was executed in the ordinary way, upon which he called in his Inspector, and the articles were taken for analysis, which showed that the butter contained a quantity of foreign fat. The boy stated that nothing was said to him about the butter, but two witnesses called for the defence, stated that he was told before he was served that they did not sell butter, but only a mixture. Mr. John Pearce produced a large enamelled tablet inscribed "Slices half-penny each. Nothing but a mixture of best Danish butter and margarine sold at this establishment," and evidence was given that these were conspicuously displayed in the establishment. The witnesses for the prosecution admitted that they might have been there, though they did not notice them, and Mr. Vaughan dismissed the summons.—G. J. Dauntun, of 1, Guildford-street, was then summoned for selling milk adulterated with 6 per cent. of added water. Evidence was given as to the purchase by John Robinson, Food and Drug Inspector, from a man in defendant's employ. Mr. Moore, for the defence, pleaded that the condition of feed was worse now than at any other time of the year, and reminded the Magistrate that this had been taken into consideration by several of his colleagues. Mr. Vaughan said that he was not going into that question at all. Mr. Moore then put in a general warranty from Mr. Stafford, of Derby, from whom the milk was purchased; but Mr. H. C. Jones, for the prosecution, pointed out that a mere general warranty was not sufficient. Mr. Vaughan imposed a penalty of 10s. and costs.—H. J. Parsons, of 6, Torrington-place, was summoned for selling milk adulterated with 6 per cent. of added water. The evidence showed that the defendant, who had an old-established confectionery business, was in the habit of selling a few glasses of milk. Mr. Vaughan imposed a mitigated penalty of 5s. and costs.

WORLD'S FAIR AWARDS.

The Morris Beef Company (Limited), of Monument-square-chambers, E.C., have obtained gold medals (highest award) at the World's Fair, for the following of their products:—Pure refined lard, smoked pork, hams and bacon, fluid and paste extract of beef, compressed corned beef, roast beef, and boiled beef.

Grocers and provision dealers would be well advised in giving the goods by the Morris Beef Company a trial. The canned goods, especially, are just of that uniform quality and excellence that would suit the taste of those wanting the best and most reliable meats, and these awards at Chicago—the highest that could possibly be given—ought to weigh with buyers.

YEAST !! YEAST !!

JANSEN & COMPY.,

WESTMOLENSTRAAT, SCHIEDAM (HOLLAND).
Gold Medal, Amsterdam, 1896.

A GOOD RELIABLE PURE YEAST IS

JANSEN & CO.'S PARROT BRAND.
TRY IT !!!

MAY BE ORDERED DIRECT FROM OUR MANUFACTORY
FRESH SHIPMENTS DAILY.

CORRESPONDENCE.

MARGARINE v. BUTTER.

To the EDITOR OF FOOD AND SANITATION.

SIR,—Dr. Harris' letter hereon in your last issue shows that he writes from the position of the Medical Officer of Health, and has no experience of the difficulty an Inspector or a purchaser has in distinguishing between butter and margarine as they are exposed for sale.

The doctor's opinions as to the wholesomeness of margarine are entitled to every respect, but not so his lame argument that to insist upon margarine being made up to distinguish it from butter would utterly ruin a most important industry. This is the chief point where the fraud comes in, because manufacturers of the imitation are allowed to make it appear what it is not, and mix it in varying proportions with the real article.

To say that to make a distinction between the colour of butter and margarine would prevent many persons using the latter is a sentimental excuse unworthy a thought.

We must contend for perfect honesty in trade, and insist that margarine be not coloured, or made up, in imitation of butter, but left its natural colour, and formed a distinctive shape, or marked with an impressed stamp, so that any person may readily distinguish between the real and counterfeit articles.

This is the weakest spot in the Margarine Act. Another serious drawback to the administration of the Adulteration Acts is the number of dealers, grocers and manufacturers who are charged with putting the law in operation, and the fact that the Inspectors are entirely at their mercy.

I am, sir, yours faithfully,

NORTH BAYTON.

26th December, 1893.

A RIVAL TO W. T. STEAD.

MURPHY'S CURE FOR CANCER.

To the EDITOR OF FOOD AND SANITATION.

SIR,—Though I believe my cure for cancer to be an immense improvement on that of Mattei, I ask leave, through your columns, to lay it freely before the public and abandon all personal interest in it. I have, indeed, worse enemies than Mattei—the police.

I had a dog some years ago who had mange very badly. I noticed that he used to roll in dung, offal or any kind of filth. I felt no doubt that he was a better physician than any of our distinguished doctors, not even excepting Drs. Carter and Stevenson, who believe that one-tenth of a grain of arsenic can kill a man. I knew that he was a cleanly dog. His fate, indeed, is historic in Ireland. "He died of pride, like Paddy Murphy's dog, taking the wall-side of a dung-cart" rather than step out into the muddy road. So I examined the various substances in which he rolled, and I came to the conclusion that sewage water was a remedy for cancer. (I am a Beast Offal exporter.)

It did not succeed as well as I expected. One of my patients died of typhoid fever, another died of gastro-enteritis, and his wife was hanged for poisoning him, though the doctors were uncertain whether it was arsenic or antimony. Some people said I ought to have been hanged instead of her, but Mr. Gladstone knows my mother's first cousin, and will, I am sure, certify to my respectability. I believe she gave him an emetic which I suppose contained antimony, and this accounted for both deaths. But the neighbours got a great fright on the last occasion that I tried the remedy, because the foolish local doctor pronounced it Asiatic cholera, and of course bacteria were found, as they always are when they are wanted.

Soon after this I was travelling in Ulster, and I noticed the smell of the steeping flax. I asked about it, and the people told me it was quite wholesome. Here was the very thing that I was in search of. Flax-water instead of sewage-water was an infallible remedy for cancer and mange—indeed it also cures glanders in the horse, which is identical with diphtheria in the human subject. Such, sir, is the secret of my remedy. The effect is increased by inhalations of carburetted or sulphuretted hydrogen. Am I not a benefactor to the human race? The spooks at least have said so.

Lower Mecklenburg-street, Dublin.

Faithfully yours,

Christmas Eve.

PATRICK MURPHY.

[Mr. Murphy's cure seems to be merely a broad travesty of the Stead-Mattei one. We think Mr. Murphy has made a mistake in sending us the above strange epistle. He ought to have sent it to Mr. W. T. Stead. Mr. Stead would, no doubt, for a consideration, be able to boom Murphy's cure for cancer as successfully as he has done Mattei's swindle. It is strange that in each case a dog should be the means of the "discovery."—EDITOR.]

POWELL'S BALSAM OF ANISEED—FOR COUGHS.

Powell's Balsam of Aniseed—Coughs and Asthma.
Powell's Balsam of Aniseed—Coughs and Bronchitis.
Powell's Balsam of Aniseed—Coughs and Hoarseness.
Powell's Balsam of Aniseed—Coughs and Lung Troubles.
Powell's Balsam of Aniseed—Coughs.—Safe and Reliable.
Powell's Balsam of Aniseed—Coughs.—Established 1824.
Powell's Balsam of Aniseed—Coughs.—Refuse Imitations
Powell's Balsam of Aniseed—Coughs.—Sold by Chemists.
Powell's Balsam of Aniseed—Coughs, Night Cough, Influenza.
Powell's Balsam of Aniseed—Coughs Relieved Instantly.
Powell's Balsam of Aniseed—Coughs.—The Oldest Remedy.
Powell's Balsam of Aniseed—Coughs.—Trade Mark.
Powell's Balsam of Aniseed—Lion, Net, and Mouse.
Powell's Balsam of Aniseed—1s. 1½d., 2s. 3d.

~~SECRET~~

N.B. 420

